SEARCH REQUEST FORM

Scientific and Technical Information Center

	/							
Requester's Full Name: Ann M	lari Kuss	Examiner #: 7x 972	Date: 2/19/02					
Art Unit: 175 Phone Number 30 5, 3176 Serial Number: 09/552, 624								
Mail Box and Bldg/Room Location: CP3 9830 Results Format Preferred (circle): PAPER DISK E-MAIL								
If mor than one search is submitted, please prioritize searches in order of need.								
Please provide a detailed statement of the								
Include the elected species or structures, k utility of the invention. Define any terms			•					
known. Please attach a copy of the cover s			, ,					
Title of Invention:		;						
Inventors (please provide full names):	D. L. Metha	•						
	De Colina Wic							
Forliggt Priority Filing Date:	101-107							
Earliest Priority Filing Date:	10/3/97		atanthand alama with all a					
For Sequence Searches Only Please inclu- appropriate serial number.	ae au perinent injormation i	(pareni, cnua, aivisionai, or issuea po	itent numbers) along with the					
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STAFF USE ONLY	Type of Search	Vendors and cost wh	*************					
Searcher: A. Fuller	NA Sequence (#)	•						
Searcher Phone #:	AA Sequence (#)	Dialog	•					
Searcher Location:	Structure (#)	Questel/Orbit						
Date Searcher Picked Up:	Bibliographic	Dr.Link						
Date Completed: 2/28/00	Litigation	Lexis/Nexis						
Searcher Prep & Review Time:	Fulltext	Sequence Systems						
Clerical Prep Time:	Patent Family	WWW/Internet						
Online Time: 35	Other	Other (specify)						

PTO-1590 (8-01)

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KOSS 09/852624 Page 1

=> file reg FILE 'REGISTRY' ENTERED AT 16:42:08 ON 28 FEB 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 27 FEB 2002 HIGHEST RN 396639-34-2 DICTIONARY FILE UPDATES: 27 FEB 2002 HIGHEST RN 396639-34-2

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

The P indicator for Preparations was not generated for all of the CAS Registry Numbers that were added to the H/Z/CA/CAplus files between 12/27/01 and 1/23/02. Use of the P indicator in online and SDI searches during this period, either directly appended to a CAS Registry Number or by qualifying an L-number with /P, may have yielded incomplete results. As of 1/23/02, the situation has been resolved. Also, note that searches conducted using the PREP role indicator were not affected.

Customers running searches and/or SDIs in the H/Z/CA/CAplus files incorporating CAS Registry Numbers with the P indicator between 12/27/01 and 1/23/02, are encouraged to re-run these strategies. Contact the CAS Help Desk at 1-800-848-6533 in North America or 1-614-447-3698, worldwide, or send an e-mail to help@cas.org for further assistance or to receive a credit for any duplicate searches.

=> file hcaplus FILE 'HCAPLUS' ENTERED AT 16:42:16 ON 28 FEB 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 28 Feb 2002 VOL 136 ISS 9 FILE LAST UPDATED: 27 Feb 2002 (20020227/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please

KATHLEEN FULLER EIC 1700/LAW LIBRARY 308-4290

• KOSS 09/852624 Page 2

check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

The P indicator for Preparations was not generated for all of the CAS Registry Numbers that were added to the CAS files between 12/27/01 and 1/23/02. As of 1/23/02, the situation has been resolved. Searches and/or SDIs in the H/Z/CA/CAplus files incorporating CAS Registry Numbers with the P indicator executed between 12/27/01 and 1/23/02 may be incomplete. See the NEWS message on this topic for more information.

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=> d que 170
L57
           1732 SEA FILE=REGISTRY ABB=ON OXIDOREDUCTASE
          79334 SEA FILE=HCAPLUS ABB=ON L57
L58
L59
          83302 SEA FILE=HCAPLUS ABB=ON L58 OR ?OXIDOREDUCTASE?
            274 SEA FILE=HCAPLUS ABB=ON L59(L) (HAIR OR KERATIN?)
L60
L61
            317 SEA FILE=HCAPLUS ABB=ON L59(L) DYE?
             75 SEA FILE=HCAPLUS ABB=ON L60 AND L61
L62
             39 SEA FILE=HCAPLUS ABB=ON L62 AND COUPL?
L63
L64
             22 SEA FILE=HCAPLUS ABB=ON L62 AND ANION? (3A) SURFACT?
             35 SEA FILE=HCAPLUS ABB=ON L62 AND (?GLUCOSE? OR ?SORBOSE? OR
L65
                ?XYLOSE? OR GLYCEROL# OR DIHYDROXY(W)ACETONE OR LACTIC OR
                LACTATE OR PYRUV? OR URIC OR RATE)
L66
              4 SEA FILE=HCAPLUS ABB=ON L62 AND (?ACYLTAUR? OR ?ACYLISETHIO?
                OR ?ACYLSARCON? OR ?ACYLGLUTAMAT? OR FATTY(W)GLUTAMID? OR
                ?GALACTOSID? OR ?OXYALKYL?)
              O SEA FILE=HCAPLUS ABB=ON L62 AND ?GLUTAMID?
L67
L68
              4 SEA FILE=HCAPLUS ABB=ON
                                         L66 OR L67
L69
             58 SEA FILE=HCAPLUS ABB=ON (L63 OR L64 OR L65 OR L66 OR L67 OR
                L68)
             53 SEA FILE=HCAPLUS ABB=ON L69 AND (COMPOSITION? OR COMPNS)
L70
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=> d 170 all 1-53 hitstr

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L70
    ANSWER 1 OF 53 HCAPLUS COPYRIGHT 2002 ACS
     2002:89799 HCAPLUS
ΑN
DN
     136:139633
     Enzyme composition for bleaching human keratinous fibres and
TΙ
     bleaching method
     Lang, Gerard; Plos, Gregory
IN
     L'oreal, Fr.
PA
     PCT Int. Appl., 28 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
     French
IC
     ICM A61K007-135
CC
     62-4 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                      KIND
                             DATE
                                            APPLICATION NO.
                                                              DATE
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PATENT NO. KIND DATE APPLICATION NO. DATE

""" WO 2002007689 Al 20020131 WO 2001-FR2093 20010629

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
```

BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG A 20000721 PRAI FR 2000-9621 The invention concerns a ready-to-use compn. for bleaching human keratinous fibers previously dyed with oxidn. dyes, comprising at least a 4-electron oxidoreductase enzyme, and at least an enzymic mediator. The invention also concerns a bleaching method using said compn. A hair bleach contained 1-hydroxy-benzotriazole 0.1, laccase (from Rhus venicifear, 180 units/mg) 1.8, excipients and water q.s. 100 g. The compn is applied on hair for 30 min, the hair is then rinsed, washed with a shampoo, and dried to remover the hair color. enzyme hair bleach oxidoreductase ST IT Polyelectrolytes Surfactants (amphoteric; enzyme compn. for bleaching human keratinous fibers, and bleaching method) IT Polyelectrolytes Surfactants (anionic; enzyme compn. for bleaching human keratinous fibers, and bleaching method) IT Hair preparations (bleaches; enzyme compn. for bleaching human keratinous fibers, and bleaching method) IT Polyelectrolytes Surfactants (cationic; enzyme compn. for bleaching human keratinous fibers, and bleaching method) IT Hair preparations (dyés, oxidative; enzyme compn. for bleaching human keratinous fibers, and bleaching method) IT Antioxidants Cladosporium cladosporioides Opacifiers Perfumes Preservatives Sequestering agents Surfactants Thickening agents (enzyme compn. for bleaching human keratinous fibers, and bleaching method) IT Ceramides Enzymes, biological studies Polymers, biological studies Polysiloxanes, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (enzyme compn. for bleaching human keratinous fibers, and bleaching method) IT Agaricus bisporus Anacardiaceae Apple Aspergillus nidulans Avocado (Persea americana) Banana (Musa) Botrytis cinerea Carrot Catharanthus roseus Ceriporiopsis subvermispora Cerrena unicolor Chaetomium thermophilum Coffee (Coffea)

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Coprinus cinereus Dichomitus squalens Fomes fomentarius Ganoderma lucidum Ginkgo biloba Glomerella cingulata Heterobasidion annosum Horse chestnut (Aesculus) Iris (plant) Lacquer tree Lactarius piperatus Maple (Acer pseudoplatanus) Monotropa hypopitys Myceliophthora thermophila Neurospora crassa Panaeolus papilionaceus Panaeolus sphinctrinus Peach (Prunus persica) Phellinus noxius Pistacia palaestina Pleurotus ostreatus Podocarpaceae Podospora anserina Polyporus pinsitus Potato (Solanum tuberosum) Pyricularia oryzae Rhizoctonia solani Rigidoporus lignosus Rosemary Russula delica Schizophyllum commune Scytalidium Thelephora terrestris Trametes hirsuta Trametes versicolor Vinca minor (laccase from; enzyme compn. for bleaching human keratinous fibers, and bleaching method) Surfactants (nonionic; enzyme compn. for bleaching human keratinous fibers, and bleaching method) Surfactants (zwitterionic; enzyme compn. for bleaching human keratinous fibers, and bleaching method) 50-53-3, Chlorpromazine, biological studies 84-08-2 84-97-9 Violuric acid 100-65-2, Phenylhydroxylamine 118-02-5 131-91-9, 1-Nitroso 2-naphthol 132-53-6, 2-Nitroso-naphthol 134-96-3, 362-03-8, 10-Phenothiazinepropionic acid Syringaldehyde Methyl 10 phenothiazinepropionate 524-38-9, N-Hydroxyphthalimide 530-57-4, Syringic acid 530-59-6 546-88-3, N-Acetylhydroxylamine 884-35-5, Methylsyringate 1207-72-3, 10-Methylphenothiazine 1532-72-5, Isoquinoline N-oxide 1613-37-2 1637-16-7, 10 Ethyl phenothiazine

7152-42-3, 10 Phenylphenothiazine

Acetosyringone

Tyrosinase

1-Hydroxypiperidine

1-naphthol 4-sulfonic acid

Oxidoreductase 15256-68-5

2007-19-4, 1-Nitroso 2-naphthol 3,6-disulfonic acid

7803-49-8, Hydroxylamine, biological studies 9002-10-2,

9003-99-0, Peroxidase 9055-15-6,

2592-95-2, 1-Hydroxybenzotriazole

3943-80-4, Ethylsyringate

5765-61-7, N, N-Diisopropylhydroxylamine

15375-48-1, 10 Propyl phenothiazine

2478-38-8,

7446-43-7, N,N-Dipropylhydroxylamine

3682-32-4, 2-Nitroso

4801-58-5,

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17427-04-2, 10 Isopropyl phenothiazine
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    methylphenothiazine 20962-92-9, 10 Allylphenothiazine 21977-42-4, 10
     Phenoxazine propionic acid
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     25324-52-1, 2-Acetyl 10 methylphenothiazine 36207-63-3D, alkyl derivs.
     54784-33-7, 1,3-Dimethyl-5-nitroso-barbituric acid
                                                          59118-51-3,
     1-Hydroxybenzimidazole 60411-11-2 80498-15-3, Laccase
                                                                 90510-22-8,
                     136832-74-1
                                   157254-35-8, 4-Carboxy-10-phenoxazine
     Hexylsyringate
     propionic acid
                      177959-98-7, Butylsyringate
                                                   177959-99-8, Octylsyringate
     309744-02-3
                  325480-33-9
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (enzyme compn. for bleaching human keratinous
        fibers, and bleaching method)
             THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
RE
(1) Ciba; GB 2304107 A 1997 HCAPLUS
(2) L'Oreal; EP 1062938 A 2000 HCAPLUS
(3) Novo Nordisk; WO 9741215 A 1997 HCAPLUS
(4) Novo Nordisk; WO 9840471 A 1998 HCAPLUS
(5) Sorensen, N; US 5899212 A 1999
     9002-10-2, Tyrosinase 9055-15-6, Oxidoreductase
TΤ
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (enzyme compn. for bleaching human keratinous
     fibers, and bleaching method) 9002-10-2 HCAPLUS
RN
CN
    Oxygenase, monophenol mono- (9CI)
                                       (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN
     9055-15-6 HCAPLUS
    Oxidoreductase (9CI)
                           (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
    ANSWER 2 OF 53 HCAPLUS COPYRIGHT 2002 ACS
AN
    2002:89797 HCAPLUS
DN
     136:139603
TI
    Enzyme composition for bleaching human keratinous fibers, and
    bleaching method
IN
    Lang, Gerard; Plos, Gregory
PA
    L'oreal, Fr.
    PCT Int. Appl., 30 pp.
SO
    CODEN: PIXXD2
DT
    Patent
LA
    French
    ICM A61K007-135
IC
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
    PATENT NO.
                     KIND DATE
                                           APPLICATION NO.
                                           ______
     ______
                      ____
                            _____
    WO 2002007687
                     A1
                            20020131
                                           WO 2001-FR2091
                                                            20010629
PΙ
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
            RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
            UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRAI FR 2000-9620
                            20000721
                      Α
    The invention concerns a ready-to-use compn. for bleaching human
AB
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keratinous fibers previously dyed with direct dyes, in particular hair, comprising at least a 4-electron oxidoreductase enzyme, and at least an enzymic mediator. The invention also concerns a bleaching method using said compn. A hair bleach contained 1-hydroxy-benzotriazole 0.1, laccase (from Rhus venicifear, 180 units/mg) 1.8, excipients and water q.s. 100 g. The compn is applied on hair for 30 min, the hair is then rinsed, washed with a shampoo, and dried to remover the hair color. enzyme hair bleach oxidoreductase ST ΙT Polyelectrolytes Surfactants (amphoteric; enzyme compn. for bleaching human keratinous fibers, and bleaching method) Polyelectrolytes IT Surfactants (anionic; enzyme compn. for bleaching human keratinous fibers, and bleaching method) IT Hair preparations (bleaches; enzyme compn. for bleaching human keratinous fibers, and bleaching method) IT Dyes Polyelectrolytes Surfactants (cationic; enzyme compn. for bleaching human keratinous fibers, and bleaching method) ΙT Dyes (direct; enzyme compn. for bleaching human keratinous fibers, and bleaching method) IT Anthraquinone dyes Antioxidants Cladosporium cladosporioides Opacifiers Perfumes Preservatives Sequestering agents Surfactants Thickening agents (enzyme compn. for bleaching human keratinous fibers, and bleaching method) ΙT Ceramides Enzymes, biological studies Polymers, biological studies Polysiloxanes, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (enzyme compn. for bleaching human keratinous fibers, and bleaching method) ΙT Agaricus bisporus Anacardiaceae Apple Aspergillus nidulans Avocado (Persea americana) Banana (Musa) Botrytis cinerea Carrot Catharanthus roseus Ceriporiopsis subvermispora Cerrena unicolor Chaetomium thermophilum Coffee (Coffea)

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Coprinus cinereus Dichomitus squalens Fomes fomentarius Ganoderma lucidum Ginkgo biloba Glomerella cingulata Heterobasidion annosum Horse chestnut (Aesculus) Iris (plant) Lacquer tree Lactarius piperatus Maple (Acer pseudoplatanus) Monotropa hypopitys Myceliophthora thermophila Neurospora crassa Panaeolus papilionaceus Panaeolus sphinctrinus Peach (Prunus persica) Phellinus noxius Pistacia palaestina Pleurotus ostreatus Podocarpaceae Podospora anserina Polyporus pinsitus Potato (Solanum tuberosum) Pyricularia oryzae Rhizoctonia solani Rigidoporus lignosus Rosemary Russula delica Schizophyllum commune Scytalidium Thelephora terrestris Trametes hirsuta Trametes versicolor Vinca minor (laccase from; enzyme compn. for bleaching human keratinous fibers, and bleaching method) Surfactants (nonionic; enzyme compn. for bleaching human keratinous fibers, and bleaching method) Surfactants (zwitterionic; enzyme compn. for bleaching human keratinous fibers, and bleaching method) 50-53-3, Chlorpromazine, biological studies 84-08-2 87-39-8, 100-65-2, Phenylhydroxylamine 118-02-5, Violuric acid 131-91-9, 1-Nitroso 2-naphthol 2,4-Dinitroso-1,3-dihydroxybenzene 132-53-6, 2-Nitroso-naphthol 134-96-3, Syringaldehyde 10-Phenothiazinepropionic acid 362-04-9, Methyl 10 524-38-9, N-Hydroxyphthalimide phenothiazinepropionate 530-57-4. 546-88-3, N-Acetylhydroxylamine Syringic acid 530-59-6 884-35-5, Methylsyringate 1207-72-3, 10-Methylphenothiazine 1532-72-5, Isoquinoline N-oxide 1613-37-2 1637-16-7, 10 Ethyl phenothiazine 2007-19-4, 1-Nitroso 2-naphthol 3,6-disulfonic acid 2478-38-8, 3682-32-4, 2-Nitroso 2592-95-2, 1-Hydroxybenzotriazole Acetosyringone

3943-80-4, Ethylsyringate

5765-61-7, N, N-Diisopropylhydroxylamine

7152-42-3, 10 Phenylphenothiazine 7446-43-7, N,N-Dipropylhydroxylamine

7803-49-8, Hydroxylamine, biological studies 9002-10-2, 9003-99-0, Peroxidase **9055-15-6**,

4801-58-5,

1-naphthol 4-sulfonic acid

1-Hydroxypiperidine

Tyrosinase

```
Oxidoreductase 15256-68-5 15375-48-1, 10 Propyl phenothiazine 17427-04-2, 10 Isopropyl phenothiazine 19607-03-5, 2-Chloro-10
    methylphenothiazine
                           20962-92-9, 10 Allylphenothiazine
                                                                 21977-42-4, 10
     Phenoxazine propionic acid
                                   22308-86-7, 4-Hydroxy-3-nitrosocoumarin
     25324-52-1, 2-Acetyl 10 methylphenothiazine
                                                    36207-63-3D, alkyl derivs.
     54784-33-7, 1,3-Dimethyl-5-nitroso-barbituric acid 59118-51-3,
     1-Hydroxybenzimidazole
                               60411-11-2
                                            80498-15-3, Laccase
                                                                   90510-22-8,
                      136832-74-1 157254-35-8, 4
177959-98-7, Butylsyringate
     Hexylsyringate
                                   157254-35-8, 4-Carboxy-10-phenoxazine
     propionic acid
                                                     177959-99-8, Octylsyringate
     309744-02-3
                   325480-33-9, 1-Hydroxybenzotriazole sulfonic acid
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (enzyme compn. for bleaching human keratinous
        fibers, and bleaching method)
RE.CNT 5
              THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Ciba; GB 2304107 A 1997 HCAPLUS
(2) L'Oreal; EP 1062938 A 2000 HCAPLUS
(3) Novo Nordisk; WO 9741215 A 1997 HCAPLUS
(4) Novo Nordisk; WO 9840471 A 1998 HCAPLUS
(5) Sorensen, N; US 5899212 A 1999
IT
     9002-10-2, Tyrosinase 9055-15-6, Oxidoreductase
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (enzyme compn. for bleaching human keratinous
        fibers, and bleaching method)
RN
     9002-10-2 HCAPLUS
CN
     Oxygenase, monophenol mono- (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     9055-15-6 HCAPLUS
RN
CN
     Oxidoreductase (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
    ANSWER 3 OF 53 HCAPLUS COPYRIGHT 2002 ACS
1.70
ΑN
     2001:864704 HCAPLUS
DN
     136:10880
ΤI
     Oxididant compositions for use in hair dye, hair wave, and hair
     bleaching compositions
     Kravtchenko, Sylvain; Plos, Gregory
IN
PΑ
     L'Oreal, Fr.
SO
     Eur. Pat. Appl., 17 pp.
     CODEN: EPXXDW
DΤ
     Patent
LA
     French
IC
     ICM A61K007-13
         A61K007-135; A61K007-09; A61K007-06
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                            APPLICATION NO.
                                                              DATE
     ______
                      ____
                             -----
                                            ______
                      A2
                                            EP 2001-401171
PΙ
     EP 1157684
                             20011128
                                                              20010507
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
                                            FR 2000-6153
                                                              20000515
     FR 2808680
                             20011116
                       A1
     JP 2001354527
                             20011225
                                            JP 2001-145697
                                                              20010515
                       Α2
PRAI FR 2000-6153
                       Α
                             20000515
     Oxididant compns. for use in hair dye,
AB
     hair wave, and hair bleaching compns. are
     disclosed comprising an enzymic oxidant such as oxidoreductase
     or peroxidase and a maleic anhydride-vinyl ether copolymer. An oxidant
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compn. contained uricase 20,000 U, Stabileze QM 1, polyglycerol monooleate 1, N-acetyl-L-cysteine 0.1, 2-amino-2-methyl-1-propanol q.s. pH = 9.5, uric acid 1, and water q.s. 100%. ST oxidant hair bleach enzyme oxidoreductase peroxidase; hair dye oxidant enzyme oxidoreductase peroxidase; wave hair oxidant enzyme oxidoreductase peroxidase Polyelectrolytes IT Surfactants (amphoteric; oxidant compns. for use in hair dye, hair wave, and hair bleaching compns.) ΙT Surfactants (anionic; oxidant compns. for use in hair dye, hair wave, and hair bleaching compns.) TT Radish (Raphanus sativus) (black, peroxidases from; oxidant compns. for use in hair dye, hair wave, and hair bleaching compns.) IT Hair preparations (bleaches; oxidant compns. for use in hair dye, hair wave, and hair bleaching compns.) IT Hair preparations (dyes; oxidant compns. for use in hair dye, hair wave, and hair bleaching compns.) ΙT Agaricus bisporus Anacardiaceae Apple Aspergillus nidulans Avocado (Persea americana) Banana (Musa) Botrytis cinerea Carrot Catharanthus roseus Ceriporiopsis subvermispora Cerrena unicolor Chaetomium thermophilum Cladosporium cladosporioides Coffee (Coffea) Coprinus cinereus Dichomitus squalens Fomes fomentarius Ganoderma lucidum Ginkqo biloba Glomerella cinqulata Heterobasidion annosum Horse chestnut (Aesculus) Iris (plant) Lacquer tree Lactarius piperatus Maple (Acer pseudoplatanus) Monotropa hypopitys Myceliophthora thermophila Neurospora crassa Panaeolus papilionaceus Panaeolus sphinctrinus Peach (Prunus persica) Phellinus noxius Pistacia palaestina Pleurotus ostreatus Podocarpaceae Podospora anserina

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Polyporus pinsitus
    Potato (Solanum tuberosum)
    Pyricularia oryzae
    Rhizoctonia solani
    Rigidoporus lignosus
    Rosemary
    Russula delica
     Schizophyllum commune
     Scytalidium
    Thelephora terrestris
    Trametes hirsuta
    Trametes versicolor
     Vinca minor
        (laccases from; oxidant compns. for use in hair dye, hair
        wave, and hair bleaching compns.)
IT
    Surfactants
        (nonionic; oxidant compns. for use in hair dye, hair wave,
        and hair bleaching compns.)
IT
     Solvents
        (org.; oxidant compns. for use in hair dye, hair wave, and
        hair bleaching compns.)
    Antioxidants
ΙT
    Opacifiers
    Oxidizing agents
    Perfumes
    Preservatives
    Sequestering agents
    Surfactants
    Thickening agents
        (oxidant compns. for use in hair dye, hair wave, and hair
       bleaching compns.)
IT
    Enzymes, biological studies
     Polymers, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidant compns. for use in hair dye, hair wave, and hair
       bleaching compns.)
IT
    Hair preparations
        (permanent wave; oxidant compns. for use in hair dye, hair
        wave, and hair bleaching compns.)
IT
    Acetobacter pasteurianus
    Apricot (Prunus armeniaca)
    Arthromyces ramosus
     Beet
    Cabbage
    Corn
    Cotton
    Garlic (Allium sativum)
    Microorganism
    Milk
    Mint
    Orange
     Raisin
     Rhubarb (Rheum)
     Soybean (Glycine max)
     Spinach (Spinacia oleracea)
     Staphylococcus faecalis
        (peroxidases from; oxidant compns. for use in hair dye, hair
        wave, and hair bleaching compns.)
IT
     Surfactants
```

```
(zwitterionic; oxidant compns. for use in hair dye, hair
        wave, and hair bleaching compns.)
     91-20-3D, Naphthalene, polyhydroxyl derivs.
IT
                                                   95-54-5D,
                                  95-55-6D, o-Aminophenol, derivs.
     1,2-Benzenediamine, derivs.
     106-50-3D, 1,4-Benzenediamine, derivs.
                                              108-45-2D, 1,3-Benzenediamine,
               123-30-8D, p-Aminophenol, derivs.
                                                   533-31-3D, Sesamol, derivs.
     derivs.
     2835-95-2, 2-Methyl-5-aminophenol
                                         9001-05-2, Catalase 9001-37-0
      Glucose oxidase
                         9001-96-1, Pyruvate oxidase
     9002-10-2, Tyrosinase 9002-12-4, Uricase
                                                9003-99-0,
     Peroxidase
                  9011-16-9, Maleic anhydride-methyl vinyl ether copolymer
     9013-66-5, Glutathione peroxidase
                                         9028-67-5, Choline oxidase
                                 9029-22-5, Sarcosine oxidase
     9028-72-2, Lactate oxidase
                 9029-52-1, Fatty acid peroxidase
                                                    9029-53-2, Cytochrome c
     9029-51-0
    peroxidase
                  9031-28-1, Iodide peroxidase
                                                9032-24-0, Nadh peroxidase
                                 9055-20-3, Chloride
    9055-15-6, Oxidoreductase
    peroxidase
                  9082-61-5, Amino acidoxidase
                                                 27100-68-1, Maleic
     anhydride-vinyl ether copolymer
                                       37250-80-9, Pyranose oxidase
                               69669-73-4, Glycerol oxidase
     66422-95-5
                 69151-32-2
     72906-87-7, L-Ascorbate peroxidase
                                         80498-15-3, Laccase
    Bilirubin oxidase
                        136392-67-1, Stabileze QM
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidant compns. for use in hair dye,
        hair wave, and hair bleaching compns.)
IT
     9001-37-0, Glucose oxidase 9002-10-2,
    Tyrosinase 9002-12-4, Uricase 9055-15-6,
    Oxidoreductase
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidant compns. for use in hair dye,
        hair wave, and hair bleaching compns.)
     9001-37-0 HCAPLUS
RN
    Oxidase, glucose (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN
     9002-10-2 HCAPLUS
                                       (CA INDEX NAME)
CN
    Oxygenase, monophenol mono- (9CI)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN
     9002-12-4 HCAPLUS
CN
    Oxidase, urate (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN
     9055-15-6 HCAPLUS
CN
    Oxidoreductase (9CI)
                          (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
    ANSWER 4 OF 53 HCAPLUS COPYRIGHT 2002 ACS
     2001:796236 HCAPLUS
AN
DN
     135:348713
     Oxidative hair dye compositions comprising 1-aminophenyl-
TΙ
     pyrrolidine and a cationic polymer
     Kravtchenko, Sylvain; Lagrange, Alain
ΙN
PA
    L'Oreal, Fr.
     Eur. Pat. Appl., 22 pp.
SO
     CODEN: EPXXDW
DT
     Patent
LA
     French
TC
     ICM A61K007-13
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CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO.
                                                             DATE
     _____
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                                           -----
                     A1 20011031
    EP 1149577
PΙ
                                           EP 2001-400881 20010405
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     FR 2807652
                      A1
                            20011019
                                           FR 2000-4993
                                                             20000418
     JP 2001354532
                                           JP 2001-120412
                       A2
                            20011225
                                                             20010418
PRAI FR 2000-4993
                      Α
                            20000418
    MARPAT 135:348713
OS
AB
    Oxidative hair dye compns. comprising 1-(4-
     aminophenyl)pyrrolidine and a cationic polymer are disclosed. A hair dye
     contained 1-(4-aminophenyl)-pyrrolidine dihydrochloride 0.470,
     2,4-diamino-1-(.beta.-hydroxyethyloxy)-benzene dihydrochloride 0.482, a
    cationic polymer 1, excipients and water q.s. 100 g. Equal amt. of the
     compn. is mixed with 20 vol hydrogen peroxide and applied on the
     hair for 30 min., the hair is then rinsed, washed with a shampoo, rinsed,
     and dried.
ST
    oxidative hair dye aminophenylpyrrolidine cationic polymer
IT
    Bromates
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (alkali metal; oxidative hair dye compns. comprising
        aminophenylpyrrolidine and cationic polymer)
IT
     Surfactants
        (amphoteric; oxidative hair dye compns. comprising
        aminophenylpyrrolidine and cationic polymer)
ΙT
     Surfactants
        (anionic; oxidative hair dye compns. comprising
        aminophenylpyrrolidine and cationic polymer)
IT
     Polyelectrolytes
     Surfactants
        (cationic; oxidative hair dye compns. comprising
        aminophenylpyrrolidine and cationic polymer)
    Hair preparations
IT
        (dyes, oxidative; oxidative hair dye compns. comprising
        aminophenylpyrrolidine and cationic polymer)
IT
     Surfactants
        (nonionic; oxidative hair dye compns. comprising
        aminophenylpyrrolidine and cationic polymer)
ΙT
     Salts, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (of peroxy acids; oxidative hair dye compns. comprising
        aminophenylpyrrolidine and cationic polymer)
IT
    Antioxidants
       Coupling agents
    Oxidizing agents
    Thickening agents
        (oxidative hair dye compns. comprising aminophenylpyrrolidine
        and cationic polymer)
ΙT
     Enzymes, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye compns. comprising aminophenylpyrrolidine
        and cationic polymer)
     89-25-8 90-15-3, ..alpha..-Naphthol 95-88-5 108-26-9 108-45 1,3-Benzenediamine, biological studies 108-46-3, 1,3-Benzenediol,
TΤ
                                                                   108-45-2,
                        124-43-6 533-31-3, Sesamol
    biological studies
                                                        591-27-5
                                                                     608-25-3
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2380-94-1, 4-Hydroxyindole
                                                             2835-95-2
     2380-86-1, 6-Hydroxyindole
     4664-16-8, 2,6-Dihydroxy-4-methylpyridine 4770-37-0, 6-Hydroxyindoline
     7556-37-8
                 7722-84-1, Hydrogen peroxide, biological studies 9003-99-0,
     Peroxidase
                 9036-19-5, Octoxynol 40 9055-15-6,
                     16867-03-1, 2-Amino-3-hydroxypyridine
     Oxidoreductase
     20493-87-2
                20493-99-6 24938-91-8, Trideceth 12 30569-52-9,
     3,6-Dimethylpyrazolo[3,2-c]-1,2,4-triazole
                                                39365-90-7
                                                             55302-96-0
     69151-32-2
                 70643-19-5 80498-15-3, Laccase
                                                    81892-72-0
                                                                  83763-47-7
     93846-05-0
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye compns. comprising
        aminophenylpyrrolidine and cationic polymer)
RE.CNT
              THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Anon; PATENT ABSTRACTS OF JAPAN 1999, V1999(11)
(2) Bittner Andreas Joachim; WO 9801106 A 1998 HCAPLUS
(3) Fuji Photo Film Co Ltd; JP 11158048 A 1999 HCAPLUS
(4) Oreal; FR 2458281 A 1981 HCAPLUS
(5) Plue, A; US 3701769 A 1972 HCAPLUS
(6) Schwarzkopf Gmbh Hans; DE 19728336 A 1998 HCAPLUS
(7) Squibb Bristol Myers Co; EP 0891765 A 1999 HCAPLUS
(8) Squibb Bristol Myers Co; EP 0962452 A 1999 HCAPLUS
(9) Yuh-Guo, P; US 5876464 A 1999 HCAPLUS
IT
     9055-15-6, Oxidoreductase
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye compns. comprising
        aminophenylpyrrolidine and cationic polymer)
RN
     9055-15-6 HCAPLUS
CN
     Oxidoreductase (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
1.70
    ANSWER 5 OF 53 HCAPLUS COPYRIGHT 2002 ACS
ΑN
     2001:796235 HCAPLUS
DN
     135:348712
     Oxidative hair dye compositions comprising 1-(4-
ΤI
     aminophenyl)pyrrolidine and a carbohydrate-based polymer
     Kravtchenko, Sylvain; Lagrange, Alain
ΙN
PA
     L'Oreal, Fr.
     Eur. Pat. Appl., 18 pp.
SO
     CODEN: EPXXDW
DT
     Patent
LA
     French
     ICM A61K007-13
IC
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                          APPLICATION NO.
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                                          EP 2001-400880
PΙ
     EP 1149576
                     A1
                           20011031
                                                            20010405
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
                                          FR 2000-4992
                                                            20000418
     FR 2807651
                      A1
                            20011019
     JP 2001335445
                                          JP 2001-120413
                      A2
                            20011204
                                                            20010418
PRAI FR 2000-4992
                            20000418
    MARPAT 135:348712
OS
AB
     Oxidative hair dye compns. comprising 1-(4-
     aminophenyl)pyrrolidine and a carbohydrate-based polymer are disclosed.
     hair dye contained 1-(4-aminophenyl)-pyrrolidine dihydrochloride 0.470,
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2,4-diamino-1-(.beta.-hydroxyethyloxy)-benzene dihydrochloride 0.482,
     nonionic guar gum 0.75, excipients and water q.s. 100 g. Equal amt. of
     the compn. is mixed with 20 vol hydrogen peroxide and applied on
     the hair for 30 min., the hair is then rinsed, washed with a shampoo,
     rinsed, and dried.
     oxidative hair dye aminophenylpyrrolidine carbohydrate polymer
ST
IT
     Bromates
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (alkali metal; oxidative hair dye compns. comprising
        aminophenylpyrrolidine and carbohydrate-based polymer)
IT
     Surfactants
        (amphoteric; oxidative hair dye compns. comprising
        aminophenylpyrrolidine and carbohydrate-based polymer)
ΙT
        (anionic; oxidative hair dye compns. comprising
        aminophenylpyrrolidine and carbohydrate-based polymer)
IT
     Polyelectrolytes
     Surfactants
        (cationic; oxidative hair dye compns. comprising
        aminophenylpyrrolidine and carbohydrate-based polymer)
IT
     Hair preparations
        (dyes, oxidative; oxidative hair dye compns. comprising
        aminophenylpyrrolidine and carbohydrate-based polymer)
     Phenols, biological studies
IT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (naphthols; oxidative hair dye compns. comprising
        aminophenylpyrrolidine and carbohydrate-based polymer)
ΙT
     Surfactants
        (nonionic; oxidative hair dye compns. comprising
        aminophenylpyrrolidine and carbohydrate-based polymer)
IT
     Salts, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (of peroxy acids; oxidative hair dye compns. comprising
        aminophenylpyrrolidine and carbohydrate-based polymer)
IT
     Antioxidants
       Coupling agents
     Oxidizing agents
     Thickening agents
        (oxidative hair dye compns. comprising aminophenylpyrrolidine
        and carbohydrate-based polymer)
TΤ
     Enzymes, biological studies
     Polysaccharides, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye compns. comprising aminophenylpyrrolidine
        and carbohydrate-based polymer)
IT
     9000-30-0, Guar gum
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (Meypro-Guar 50, non-ionic; oxidative hair dye compns.
        comprising aminophenylpyrrolidine and carbohydrate-based polymer)
ΙT
     89-25-8 90-15-3, .alpha.-Naphthol 91,3-Benzenediamine, biological studies
                                            95-88-5
                                                     108-26-9
                                               108-45-2D, 1,3-Benzenediamine,
               108-46-3, 1,3-Benzenediol, biological studies
     derivs.
                                                                124-43-6
     533-31-3, Sesamol
                         591-27-5
                                    591-27-5D, derivs.
                                                          608-25-3
                                                                      2380-86-1,
                       2380-94-1, 4-Hydroxyindole
                                                    2835-95-2
     6-Hydroxyindole
                                                                  4664-16-8,
                                     4770-37-0, 6-Hydroxy indoline
     2,6-Dihydroxy-4-methylpyridine
                                                                        7556-37-8
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7722-84-1, Hydrogen peroxide, biological studies 9000-01-5, Gum arabic
    9000-07-1, Carrageenan 9000-28-6, Ghatti gum 9000-36-6, Karaya gum
    9000-40-2, Carob gum 9000-65-1, Tragacanth 9000-69-5, Pectin
    9002-18-0, Agar 9003-99-0, Peroxidase 9005-25-8, Starch, biological
              9005-32-7, Alginic acid 9055-15-6,
                    11138-66-2, Xanthan 16867-03-1,
    Oxidoreductase
                               30569-52-9, 3-6-Dimethylpyrazolo[3,2-c]-1,2,4-
    2-Amino-3-hydroxypyridine
              39464-87-4, Scleroglucan 55302-96-0 69151-32-2 70643-19-5
    triazole
    80498-15-3, Laccase
                         81892-72-0 83763-47-7 93846-05-0
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (oxidative hair dye compns. comprising
       aminophenylpyrrolidine and carbohydrate-based polymer)
RE.CNT 9
             THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Anon; PATENT ABSTRACTS OF JAPAN 1999, V1999(11)
(2) Bittner Andreas Joachim; WO 9801106 A 1998 HCAPLUS
(3) Fuji Photo Film Co Ltd; JP 11158048 A 1999 HCAPLUS
(4) Oreal; FR 2773472 A 1999 HCAPLUS
(5) Samain, H; US 5685882 A 1997 HCAPLUS
(6) Schwarzkopf Gmbh Hans; DE 19728336 A 1998 HCAPLUS
(7) Squibb Bristol Myers Co; EP 0891765 A 1999 HCAPLUS
(8) Squibb Bristol Myers Co; EP 0962452 A 1999 HCAPLUS
(9) Yuh-Guo, P; US 5876464 A 1999 HCAPLUS
TΤ
    9055-15-6, Oxidoreductase
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye compns. comprising
        aminophenylpyrrolidine and carbohydrate-based polymer)
     9055-15-6 HCAPLUS
RN
CN
    Oxidoreductase (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L70 ANSWER 6 OF 53 HCAPLUS COPYRIGHT 2002 ACS
AN
    2001:796234 HCAPLUS
DN
    135:348711
    Oxidative hair dye compositions comprising 1-(4-aminophenyl)-
TΙ
    pyrrolidine derivatives and a particular direct dve
    Kravtchenko, Sylvain; Lagrange, Alain
IN
PΑ
    L'Oreal, Fr.
SO
    Eur. Pat. Appl., 100 pp.
    CODEN: EPXXDW
DT
    Patent
LA
    French
IC
    ICM A61K007-13
CC
    62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
                                          APPLICATION NO.
    PATENT NO.
                     KIND DATE
                           _____
                                          _____
     _____
                                        EP 2001-400879
                           20011031
                                                           20010405
PΙ
    EP 1149575
                     A1
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
                                          FR 2000-4991
                                                           20000418
     FR 2807650
                           20011019
                      A1
                                          JP 2001-120414
                                                           20010418
     JP 2001335446
                      A2
                           20011204
PRAI FR 2000-4991
                           20000418
OS
    MARPAT 135:348711
    Oxidative hair dye compns. comprise 1-(4-aminophenyl)-
AB
     pyrrolidine and a particular direct dye such as nitrobenzene derivs. or
     quaternary ammonium derivs. A hair dye contained 1-(4-aminophenyl)-
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pyrrolidine dihydrochloride 0.235, 2,4-diamino-1-(.beta.-hydroxyethyloxy)-
    benzene dihydrochloride 0.241, Basic Red-51 0.168, excipients and water
    q.s. 100 g. Equal amt. of the compn. is mixed with 20 vol
    hydrogen peroxide and applied on the hair for 30 min, the hair is then
    rinsed, washed with a shampoo, rinsed, and dried.
    oxidative hair dye aminophenylpyrrolidine direct dye
ST
TΤ
    Bromates
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (alkali metal; oxidative hair dye compns. comprising
        aminophenylpyrrolidine derivs. and particular direct dye)
    Hair preparations
IT
        (creams; oxidative hair dye compns. comprising
        aminophenylpyrrolidine derivs. and particular direct dye)
IT
        (direct; oxidative hair dye compns. comprising
        aminophenylpyrrolidine derivs. and particular direct dye)
ΙT
    Hair preparations
        (dyes, oxidative; oxidative hair dye compns. comprising
        aminophenylpyrrolidine derivs. and particular direct dye)
TΤ
    Alcohols, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (fatty; oxidative hair dye compns. comprising
        aminophenylpyrrolidine derivs. and particular direct dye)
ΙT
    Hair preparations
        (gels; oxidative hair dye compns. comprising
        aminophenylpyrrolidine derivs. and particular direct dye)
ΙT
    Phenols, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (naphthols; oxidative hair dye compns. comprising
        aminophenylpyrrolidine derivs. and particular direct dye)
    Salts, biological studies
ΙT
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (of peroxy acids; oxidative hair dye compns. comprising
        aminophenylpyrrolidine derivs. and particular direct dye)
ΙT
    Solvents
        (org.; oxidative hair dye compns. comprising
        aminophenylpyrrolidine derivs. and particular direct dye)
IT
    Antioxidants
       Coupling agents
    Opacifiers
    Oxidizing agents
    Preservatives
    Reducing agents
    Sequestering agents
    Sunscreens
    Thickening agents
        (oxidative hair dye compns. comprising aminophenylpyrrolidine
        derivs. and particular direct dye)
    Acids, biological studies
    Alkali metal hydroxides
    Ceramides
    Paraffin oils
    Peroxysulfates
     Polymers, biological studies
     Polysiloxanes, biological studies
     Vitamins
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Waxes

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RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye compns. comprising aminophenylpyrrolidine
        derivs. and particular direct dye)
IT
     Group IIIA element compounds
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (perborates; oxidative hair dye compns. comprising
        aminophenylpyrrolidine derivs. and particular direct dye)
TΤ
     Fats and Glyceridic oils, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (vegetable; oxidative hair dye compns. comprising
        aminophenylpyrrolidine derivs. and particular direct dye)
IT
               90-15-3, .alpha.-Naphthol
                                            95-54-5, o-Phenylenediamine,
     biological studies
                          95-55-6, o-Aminophenol
                                                    95-70-5
                                                               95-88-5
                                                                          99-56-9
               106-50-3, 1,4-Benzenediamine, biological studies
                                                                    108-26-9
     99-57-0
     108-45-2, 1,3-Benzenediamine, biological studies
                                                          108-45-2D,
                                    108-46-3, 1,3-Benzenediol, biological
     1,3-Benzenediamine, derivs.
               119-34-6
                          121-88-0
                                      123-30-8, p-Aminophenol
                                                                 124-43-6
     studies
                                                591-27-5D, derivs.
     533-31-3, Sesamol
                         570-24-1
                                     591-27-5
                                                                      603-85-0
                610-81-1
                            2380-86-1, 6-Hydroxyindole
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        (oxidative hair dye compns. comprising aminophenylpyrrolidine
        derivs. and particular direct dye)
              THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
       11
RF.
(1) Akram, M; US 5067967 A 1991 HCAPLUS
(2) Anon; PATENT ABSTRACTS OF JAPAN 1999, V1999(11)
(3) Bittner Andreas Joachim; WO 9801106 A 1998 HCAPLUS
(4) Fuji Photo Film Co Ltd; JP 11158048 A 1999 HCAPLUS
(5) Oreal; EP 0920856 A 1999 HCAPLUS
(6) Oreal; EP 0970687 A 2000 HCAPLUS
(7) Plue, A; US 3701769 A 1972 HCAPLUS
(8) Schwarzkopf Gmbh Hans; DE 19728336 A 1998 HCAPLUS
(9) Squibb Bristol Myers Co; EP 0891765 A 1999 HCAPLUS
(10) Squibb Bristol Myers Co; EP 0962452 A 1999 HCAPLUS
(11) Yuh-Guo, P; US 5876464 A 1999 HCAPLUS
IT
     9055-15-6, Oxidoreductase
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye compns. comprising
        aminophenylpyrrolidine derivs. and particular direct dye)
RN
     9055-15-6 HCAPLUS
CN
     Oxidoreductase (9CI)
                           (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L70
     ANSWER 7 OF 53 HCAPLUS COPYRIGHT 2002 ACS
AN
     2001:780635 HCAPLUS
DN
     135:335001
     Oxidation dyeing composition for keratinous fibers comprising a
TΙ
     3,5-diamino-pyridine derivative and a cationic or amphoteric polymer
     Audousset, Marie-pascale
ΙN
PA
     L'oreal, Fr.
     PCT Int. Appl., 47 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     French
IC
     ICM A61K007-13
     62-3 (Essential Oils and Cosmetics)
CC
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                            APPLICATION NO.
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                             20011019
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PRAI FR 2000-4720
                             20000412
OS
     MARPAT 135:335001
     The invention concerns an oxidn. dyeing compn. for keratinous
AB
     fibers, in particular human keratinous dyeing such as hair comprising, in
     a medium suitable for dyeing, at least a coupling agent selected
     among 3,5-diamino-pyridine derivs. and their addn. salts with an acid, at
     least an oxidn. base, and at least a particular cationic or amphoteric
     polymer. The invention also concerns dyeing methods and devices using
     said compn. An oxidative hair dye contained
     2,6-dimethoxy-3,5-diamino-pyridine hydrochloride 0.363, p-phenylenediamine
     0.324, 2,4-diamino-1-(.beta.-hydroxy-ethoxy)benzene 0.361, a quaternary
     ammonium polymer 2.16, excipients and water q.s. 100 g. Equal amt. of the
     compn. is mixed with 20 vol. hydrogen peroxide, the pH is adjusted
     to 3, then applied on the hair for 30 min. The hair is then rinsed,
     washed with shampoo, and dried to obtain a strong brown color.
ST
     oxidn hair dye aminopyridine deriv polymer
ΙT
     Polysiloxanes, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        ([(aminoethyl)amino]propyl hydroxy, di-Me, trimethylsilyl; oxidn.
        dyeing compn. for keratinous fibers comprising
        diamino-pyridine deriv. and cationic or amphoteric polymer)
IT
     Polysiloxanes, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (amino-contg.; oxidn. dyeing compn. for keratinous fibers
        comprising diamino-pyridine deriv. and cationic or amphoteric polymer)
ΙT
     Polyelectrolytes
        (amphoteric; oxidn. dyeing compn. for keratinous fibers
        comprising diamino-pyridine deriv. and cationic or amphoteric polymer)
ΙT
     Polyelectrolytes
        (cationic; oxidn. dyeing compn. for keratinous fibers
        comprising diamino-pyridine deriv. and cationic or amphoteric polymer)
ΙT
        (direct; oxidn. dyeing compn. for keratinous fibers
        comprising diamino-pyridine deriv. and cationic or amphoteric polymer)
IT
     Hair preparations
        (dyes, oxidative; oxidn. dyeing compn. for keratinous fibers
        comprising diamino-pyridine deriv. and cationic or amphoteric polymer)
IT
     Phenols, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (naphthols; oxidn. dyeing compn. for keratinous fibers
        comprising diamino-pyridine deriv. and cationic or amphoteric polymer)
     Salts, biological studies
IT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (of peroxy acids; oxidn. dyeing compn. for keratinous fibers
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comprising diamino-pyridine deriv. and cationic or amphoteric polymer)
IT ·
     Antioxidants
       Coupling agents
     Oxidizing agents
     Reducing agents
        (oxidn. dyeing compn. for keratinous fibers comprising
        diamino-pyridine deriv. and cationic or amphoteric polymer)
IT
     Acrylic polymers, biological studies
     Bromates
     Enzymes, biological studies
     Polyurethanes, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (oxidn. dyeing compn. for keratinous fibers comprising
        diamino-pyridine deriv. and cationic or amphoteric polymer)
     Quaternary ammonium compounds, biological studies
IT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (polymers; oxidn. dyeing compn. for keratinous fibers
        comprising diamino-pyridine deriv. and cationic or amphoteric polymer)
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     367269-14-5
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (oxidn. dyeing compn. for keratinous
        fibers comprising diamino-pyridine deriv. and cationic or amphoteric
        polymer)
              THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
RE
(1) Hoeffkes, H; US 4698065 A 1987 HCAPLUS
(2) Lang, G; US 4923977 A 1990 HCAPLUS
(3) Lang, G; US 5279616 A 1994 HCAPLUS
(4) Moeller, H; US 5743919 A 1998 HCAPLUS
(5) Wella Aq; DE 4018335 A 1991 HCAPLUS
IT
     9055-15-6, Oxidoreductase
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidn. dyeing compn. for keratinous
        fibers comprising diamino-pyridine deriv. and cationic or amphoteric
        polymer)
     9055-15-6 HCAPLUS
RN
     Oxidoreductase (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     ANSWER 8 OF 53 HCAPLUS COPYRIGHT 2002 ACS
L70
     2001:780634 HCAPLUS
AN
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KOSS
       09/852624
                      Page 21
     135:335000
DN
     Oxidation dyeing composition for keratinous fibers comprising a
TI
     3,5-diamino-pyridine derivative and a particular thickening polymer
     Audousset, Marie-pascale
IN
PA
     L'oreal, Fr.
     PCT Int. Appl., 40 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     French
     ICM A61K007-13
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CC
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             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
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PRAI FR 2000-4721
                       Α
     MARPAT 135:335000
OS
AΒ
     The invention concerns an oxidn. dyeing compn. for keratinous
     fibers, in particular human keratinous fibers such as hair, comprising, in
     a medium suitable for dyeing, at least a coupling agent selected
     among 3,5-diamino-pyridine derivs. and their addn. salts with an acid, at
     least an oxidn. base, and a particular thickening polymer. The invention
     also concerns dyeing methods and devices using said compn. An
     oxidative hair dye contained 2,6-dimethoxy-3,5-diamino-pyridine
     hydrochloride 0.363, p-phenylenediamine 0.324, 2,4-diamino-1-(.beta.-
     hydroxy-ethoxy)benzene 0.361, Aculyn-44 4, excipients and water q.s. 100
         Equal amt. of the compn. is mixed with 20 vol. hydrogen
     peroxide, the pH is adjusted to 3, then applied on the hair for 30 min.
     The hair is then rinsed, washed with shampoo, and dried to obtain a
     natural brown color.
ST
     oxidn hair dye aminopyridine deriv thickening polymer
ΙT
     Surfactants
        (amphoteric; oxidn. dyeing compn. for keratinous fibers
        comprising diamino-pyridine deriv. and particular thickening polymer)
IT
     Polyelectrolytes
       Surfactants
        (anionic; oxidn. dyeing compn. for keratinous
        fibers comprising diamino-pyridine deriv. and particular thickening
        polymer)
IT
     Polyelectrolytes
     Surfactants
        (cationic; oxidn. dyeing compn. for keratinous fibers
        comprising diamino-pyridine deriv. and particular thickening polymer)
ΙT
     Hair preparations
        (dyes, oxidative; oxidn. dyeing compn. for keratinous fibers
        comprising diamino-pyridine deriv. and particular thickening polymer)
IT
     Phenols, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (naphthols; oxidn. dyeing compn. for keratinous fibers
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comprising diamino-pyridine deriv. and particular thickening polymer)
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     Salts, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (of peroxy acids; oxidn. dyeing compn. for keratinous fibers
        comprising diamino-pyridine deriv. and particular thickening polymer)
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     Coupling agents
     Thickening agents
        (oxidn. dyeing compn. for keratinous fibers comprising
        diamino-pyridine deriv. and particular thickening polymer)
ΙT
     Bromates
     Enzymes, biological studies
     Polymers, biological studies
     Polysaccharides, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidn. dyeing compn. for keratinous fibers comprising
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                   138757-67-2, Carbopol 980-
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                 367269-14-5
     Aculyn-44
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (oxidn. dyeing compn. for keratinous
        fibers comprising diamino-pyridine deriv. and particular thickening
        polymer)
RE.CNT
              THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Hoeffkes, H; US 4698065 A 1987 HCAPLUS
(2) Lang, G; US 4923977 A 1990 HCAPLUS
(3) Lang, G; US 5279616 A 1994 HCAPLUS
(4) Moeller, H; US 5743919 A 1998 HCAPLUS
(5) Wella Ag; DE 4018335 A 1991 HCAPLUS
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     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidn. dyeing compn. for keratinous
        fibers comprising diamino-pyridine deriv. and particular thickening
        polymer)
RN
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CN
     Oxidoreductase (9CI)
                            (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     ANSWER 9 OF 53 HCAPLUS COPYRIGHT 2002 ACS
L70
ΑN
     2001:780402 HCAPLUS
DN
     135:322520
     Oxidative hair dye composition containing 1-(4-aminophenyl)-
TΤ
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Dichomitus squalens

IT

ΙT

ΙT

IT

Fomes fomentarius Ganoderma lucidum Ginkgo biloba Glomerella cinqulata Heterobasidion annosum Horse chestnut (Aesculus) Iris (plant) Lacquer tree Lactarius piperatus Maple (Acer pseudoplatanus) Monotropa hypopitys Myceliophthora thermophila Neurospora crassa Panaeolus papilionaceus Panaeolus sphinctrinus Peach (Prunus persica) Phellinus noxius Pistacia palaestina Pleurotus ostreatus Podocarpaceae Podospora anserina Polyporus pinsitus Potato (Solanum tuberosum) Pyricularia oryzae Rhizoctonia solani Rigidoporus lignosus Rosemary Russula delica Schizophyllum commune Scytalidium Thelephora terrestris Trametes hirsuta Trametes versicolor Vinca minor (laccase obtained from; oxidative hair dye compn. contg. 1-(4-aminophenyl)-pyrrolidine and enzymic oxidn. system) Phenols, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (naphthols; oxidative hair dye compn. contg. 1-(4-aminophenyl)-pyrrolidine and enzymic oxidn. system) Acetobacter pasteurianus Anthraquinone dyes Arthromyces ramosus Azo dyes Enterococcus faecalis Microorganism (oxidative hair dye compn. contg. 1-(4-aminophenyl)pyrrolidine and enzymic oxidn. system) Enzymes, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (oxidative hair dye compn. contg. 1-(4-aminophenyl)pyrrolidine and enzymic oxidn. system) Apple Apricot (Prunus armeniaca) Barley Beet (Beta vulgaris rapacea) Cabbage Corn

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Cotton
    Garlic (Allium sativum)
    Mint
     Radish (Raphanus sativus)
     Raisin
     Rhubarb (Rheum)
     Soybean (Glycine max)
     Spinach (Spinacia oleracea)
        (peroxidase obtained from; oxidative hair dye compn. contg.
        1-(4-aminophenyl)-pyrrolidine and enzymic oxidn. system)
    Albumins, biological studies
IT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (serum; oxidative hair dye compn. contg. 1-(4-aminophenyl)-
        pyrrolidine and enzymic oxidn. system)
ΙT
     89-25-8
               90-15-3, .alpha.-Naphthol
                                           95-88-5, 4-Chloro
     1,3-dihydroxybenzene
                            108-26-9
                                      108-45-2, 1,3-Diaminobenzene, biological
               108-46-3, 1,3-Dihydroxybenzene, biological studies
     studies
                                                                     533-31-3,
               591-27-5, 3 Aminophenol
                                        608-25-3, 1,3-Dihydroxy-2-
    Sesamol
                   2380-86-1, 6-Hydroxyindole
    methylbenzene
                                                 2380-94-1, 4-Hydroxyindole
     2835-95-2, 2 Methyl 5 aminophenol
                                         4664-16-8
                                                     4770-37-0,
     6-Hydroxyindoline 7556-37-8 9001-37-0, Glucose
               9001-96-1, Pyruvate oxidase 9002-10-2,
    Tyrosinase 9002-12-4, Uricase
                                    9003-99-0, Peroxidase
                                         9028-67-5, Choline oxidase
     9013-66-5, Glutathione peroxidase
     9028-72-2, Lactate oxidase 9029-22-5, Sarcosine oxidase
                                                    9029-53-2, Cytochrome c
                 9029-52-1, Fatty acid peroxidase
     9029-51-0
    peroxidase
                  9031-28-1, Iodide peroxidase
                                                 9032-24-0, Nadh peroxidase
                                 9055-20-3, Chloride
    9055-15-6, Oxidoreductase
    peroxidase
                  9082-61-5, Aminoacid oxidase
                                                 16867-03-1
                                                              30569-52-9
                               66422-95-5
                                            69151-32-2
                                                         69669-73-4,
     54381-16-7
                  55302-96-0
                                                  80498-15-3, Laccase
                        70643-19-5
                                     72906-87-7
    Glycerol oxidase
                                     81892-72-0
                                                  83763-47-7
                                                               93846-05-0
     80619-01-8, Bilirubin oxidase
     163260-77-3
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye compn. contg.
        1-(4-aminophenyl)-pyrrolidine and enzymic oxidn. system)
              THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
RE
(1) Bristol-Myers Squibb Company; US 5851237 A 1998 HCAPLUS
(2) Bristol-Myers Squibb Company; EP 0891765 A 1999 HCAPLUS
(3) Kyowa Hakko Kogyo Kk Et Al; EP 0310675 A 1989 HCAPLUS
(4) Oreal, L; FR 2773478 A 1999 HCAPLUS
ΙT
     9001-37-0, Glucose oxidase 9002-10-2,
    Tyrosinase 9002-12-4, Uricase 9055-15-6,
    Oxidoreductase
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (oxidative hair dye compn. contg.
        1-(4-aminophenyl)-pyrrolidine and enzymic oxidn. system)
RN
     9001-37-0 HCAPLUS
    Oxidase, glucose (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     9002-10-2 HCAPLUS
RN
     Oxygenase, monophenol mono- (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE **.*
     9002-12-4 HCAPLUS
RN
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Page 26 KOSS 09/852624 Oxidase, urate (9CI) (CA INDEX NAME) CN *** STRUCTURE DIAGRAM IS NOT AVAILABLE *** RN 9055-15-6 HCAPLUS Oxidoreductase (9CI) (CA INDEX NAME) CN *** STRUCTURE DIAGRAM IS NOT AVAILABLE *** T.70 ANSWER 10 OF 53 HCAPLUS COPYRIGHT 2002 ACS 2001:729700 HCAPLUS AN 135:277747 DN Oxidative hair dyes containing pyridine derivatives and enzymic oxidants TI IN Plos, Gregory PA L'oreal, Fr. SO Eur. Pat. Appl., 17 pp. CODEN: EPXXDW DT Patent LA French ICM A61K007-13 IC 62-4 (Essential Oils and Cosmetics) CC FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE -----EP 1138318 A2 20011004 EP 2001-400746 20010322 PΙ EP 1138318 A3 20011121 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO FR 2806908 20011005 FR 2000-4061 20000330 Α1 JP 2001278755 A2 20011010 JP 2001-97004 20010329 BR 2001001699 Α 20011204 BR 2001-1699 20010329 CN 1324608 20011205 CN 2001-112304 20010329 Α US 2002013973 A1 20020207 US 2001-820016 20010329 PRAI FR 2000-4061 20000330 OS MARPAT 135:277747 AB The title hair dyes are claimed. An oxidative hair dye compn. contained 2,6-dimethoxy-3,5-diaminopyridine dihydrochloride 0.636, paraphenylenediamine 0.324, laccase 5, water and excipients q.s. 100 g. The compn. is applied on the hair for 30 min, the hair is then rinsed, washed with shampoo, and dried to obtain a dark blue color. ST oxidative hair dye pyridine enzymic oxidant ΙT Hair preparations (dyes, oxidative; oxidative hair dyes contg. pyridine derivs. and enzymic oxidants) ΙT Oxidizing agents (oxidative hair dyes contg. pyridine derivs. and enzymic oxidants) TΤ Enzymes, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (oxidative hair dyes contg. pyridine derivs. and enzymic oxidants) 90-15-3, .alpha.-Naphthol 92-65-9 93-05-0 95-55-6, 2 IT 89-25-8 95-88-5, 4-Chloro-1,3-dihydroxybenzene 99-98-9 95-70-5 aminophenol 106-50-3, p-Phenylenediamine, biological studies 108-26-9 101-54-2 108-45-2, 1,3-Diaminobenzene, biological studies 108-46-3, 1,3-Dihydroxybenzene, biological studies 110-86-1D, Pyridine, derivs. 148-71-0 289-95-2D, Pyrimidine, derivs. 123-30-8, p-Aminophenol 399-95-1, 4-Amino-3-fluorophenol 399-96-2, 4-Amino-2-fluoro phenol 533-31-3, Sesamol 537-65-5 591-27-5, 3 aminophenol 608-25-3, 1,3-Dihydroxy-2-methyl benzene 615-66-7 1630-11-1 2359-52-6 2359-53-7 2380-86-1, 6-Hydroxyindole 2380-94-1, 4-Hydroxyindole 2835-95-2, 2-Methyl-5-Aminophenol 2835-96-3, 4-Amino-2-methyl phenol

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2835-99-6, 4-Amino-3-methyl phenol
     2835-98-5, 2 amino5-methylphenol
     4664-16-8, 2,6-Dihydroxy-4-methyl pyridine 4770-37-0, 6-Hydroxyindoline
                5862-80-6
                                         6604-51-9
                             6393-01-7
     5306-96-7
                                                     7218-02-2
                                                                 7469-77-4,
                           7556-37-8
                                       7575-35-1
     2-Methyl-1-naphthol
                                                   9001-05-2, Catalase
     9001-37-0, Glucose oxidase
                                  9001-96-1, Pyruvate
     oxidase 9002-10-2, Tyrosinase 9002-12-4, Uricase
                             9013-66-5, Glutathione peroxidase
     9003-99-0, Peroxidase
                                                                 9028-72-2,
                       9029-51-0
                                  9029-52-1, Fatty acid peroxidase
    Lactate oxidase
     9029-53-2, Cytochrome peroxidase 9031-28-1, Iodide peroxidase
     9032-24-0, Nadh peroxidase 9055-20-3, Chloride peroxidase
                                                                   14791-78-7
     16867-03-1, 2-Amino-3-hydroxypyridine
                                           17672-22-9, 2 amino 6-methylphenol
     28020-38-4
                 29785-47-5, 4-Amino-2-methoxymethyl phenol
                                                             30569-52-9,
     3,6-Dimethyl-pyrazolo[3,2-c]1,2,4-triazole
                                                  37250-80-9, Pyranose oxidase
     39455-90-8D, Pyrazolone, derivs.
                                        55302-96-0
                                                     56216-28-5
                                                                  63969-43-7
     66566-48-1
                  69669-73-4, Glycerol oxidase
                                                 70643-19-5
     72906-87-7, Ascorbate peroxidase
                                        73793-80-3
                                                     79352-72-0,
     4-Amino-2-aminomethyl phenol
                                                 80498-15-3, Laccase
                                    80467-77-2
                  83763-47-7
                                           90817-34-8
                               85679-78-3
     81892-72-0
                                                        93841-24-8
                  97902-52-8
                               104333-09-7, 4-Amino-2-hydroxymethyl phenol
     94166-62-8
     105293-89-8
                  105607-68-9
                                 110952-46-0
                                               126335-43-1
                                                             129697-50-3,
     5-acetamido 2 amino phenol
                                  130582-53-5
                                                135855-34-4
                                                              135855-35-5
                                                   207568-58-9
     168202-61-7, 4-Amino-3-hydroxymethyl phenol
                                                                 217318-23-5
                   221110-59-4
                                               362612-41-7
     221110-58-3
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     362612-44-0
                   362612-48-4
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dyes contg. pyridine derivs. and
        enzymic oxidants)
IT
     9001-37-0, Glucose oxidase 9002-10-2,
     Tyrosinase 9002-12-4, Uricase
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dyes contg. pyridine derivs. and
        enzymic oxidants)
RN
     9001-37-0 HCAPLUS
CN
    Oxidase, glucose (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     9002-10-2 HCAPLUS
RN
CN
    Oxygenase, monophenol mono- (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     9002-12-4 HCAPLUS
RN
    Oxidase, urate (9CI)
CN
                           (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L70
    ANSWER 11 OF 53 HCAPLUS COPYRIGHT 2002 ACS
AN
     2001:703875 HCAPLUS
DN
     135:231479
ΤI
     Composition for oxidative dyeing of keratinic fibers comprising
     two special quaternary polyammonium compounds
IN
     Bebot, Cecile; Rondeau, Christine; Cottard, Francois; Boudy, Francoise
PA
     L'Oreal, Fr.
SO
     Fr. Demande, 42 pp.
     CODEN: FRXXBL
DT
     Patent
LA
     French
IC
     ICM A61K007-13
     62-3 (Essential Oils and Cosmetics)
CC
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FAN.CNT 1
                       KIND DATE
     PATENT NO.
                                             APPLICATION NO.
                                                               DATE
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     FR 2803198
PΙ
                       A1
                             20010706
                                             FR 1999-16764
                                                               19991230
                       A1
                             20011010
                                             EP 2000-403474
                                                               20001211
     EP 1142553
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
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                             20010731
                                             BR 2000-6554
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                        Α
                             20010718
                                             CN 2000-131089
                                                               20001229
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     US 2002013972
                        A1
                                                               20010102
     JP 2001206826
                        A2
                             20010731
                                             JP 2001-252
                                                               20010104
PRAI FR 1999-16764
                        Α
                             19991230
     MARPAT 135:231479
OS
     Oxidative hair dye prepns. contg. a dialkyldiallylammonium
AB
     cyclohomopolymer and a quaternary ammonium polymer are claimed. An
     oxidant compn. contained fatty alc. 2.3, ethoxylated fatty alc. 0.6, fatty amide 0.9, glycerin 0.5, hydrogen peroxide 7.5, fragrance q.s.,
     and water q.s. 100 g. A hair dye compn. contained Nafol 20-22 3, Nafolox 20-22 1.35, ethoxylated stearyl alc. 6, oleic acid 2.6, glycol
     distearate 2, propylene glycol 5, copra acid monoisopropanolamide 2,
     Aculyn-44 1.4, crosslinked polyacrylic acid 0.6, cationic polymers 3,
     Merquat-100 0.4, reducing agent 0.7, sequestering agents 0.2,
     1,3-dihydroxybenzene 0.6, 1,4-diaminobenzene 0.5, 1-hydroxy-3-aminobenzene
     0.1, 1-hydroxy-2-aminobenzene 0.05, 1-hydroxy-4-aminobenzene 0.09,
     6-hydroxybenzomorpholine 0.017, 1-.beta.-hydroxyethyloxy-2,4-
     diaminobenzene dihydrochloride 0.039, propylene glycol monobutyl ether
     2.5, monoethanolamine 1.06, 20.5% ammonia 11.1, and water q.s. 100 g. One
     part of the dye compn. is mixed with 1.5 parts of oxidant
     compn. and applied on a 90% white hair for 30 min., the hair is
     then rinsed with water, washed with shampoo, rinsed and dried to obtain a
     clear chestnut color.
     oxidative hair dye alkyldiallylammonium cyclohomopolymer; quaternary
ST
     ammonium polymer oxidative hair dye
ΙT
     Bromates
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (alkali metal salts; oxidative hair dye prepn. comprising
        dialkyldiallylammonium cyclohomopolymer and quaternary ammonium
        polymer)
IT
     Surfactants
        (amphoteric; oxidative hair dye prepn. comprising
        dialkyldiallylammonium cyclohomopolymer and quaternary ammonium
        polymer)
ΙT
     Polyelectrolytes
       Surfactants
        (anionic; oxidative hair dye prepn. comprising
        dialkyldiallylammonium cyclohomopolymer and quaternary ammonium
        polymer)
ΙT
     Polyelectrolytes
     Surfactants
        (cationic; oxidative hair dye prepn. comprising dialkyldiallylammonium
        cyclohomopolymer and quaternary ammonium polymer)
ΙŢ
        (direct; oxidative hair dye prepn. comprising dialkyldiallylammonium
        cyclohomopolymer and quaternary ammonium polymer)
IT
     Hair preparations
        (dyes, oxidative; oxidative hair dye prepn. comprising
        dialkyldiallylammonium cyclohomopolymer and quaternary ammonium
        polymer)
IT
     Alcohols, biological studies
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RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (fatty; oxidative hair dye prepn. comprising dialkyldiallylammonium
        cyclohomopolymer and quaternary ammonium polymer)
ΙT
     Surfactants
        (nonionic; oxidative hair dye prepn. comprising dialkyldiallylammonium
        cyclohomopolymer and quaternary ammonium polymer)
IT
     Salts, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (of peroxy acids; oxidative hair dye prepn. comprising
        dialkyldiallylammonium cyclohomopolymer and quaternary ammonium
        polymer)
ΙT
    Coupling agents
    Oxidizing agents
    Reducing agents
     Surfactants
     Thickening agents
        (oxidative hair dye prepn. comprising dialkyldiallylammonium
        cyclohomopolymer and quaternary ammonium polymer)
IT
    Enzymes, biological studies
     Polymers, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye prepn. comprising dialkyldiallylammonium
        cyclohomopolymer and quaternary ammonium polymer)
    Quaternary ammonium compounds, biological studies
IΤ
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (polymers; oxidative hair dye prepn. comprising dialkyldiallylammonium
        cyclohomopolymer and quaternary ammonium polymer)
     Fats and Glyceridic oils, biological studies
IΤ
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (vegetable; oxidative hair dye prepn. comprising dialkyldiallylammonium
        cyclohomopolymer and quaternary ammonium polymer)
     79-10-7D, Acrylic acid, polymers with dimethyldiallyammonium salts
     108-45-2D, 1,3-Benzenediamine, derivs. 110-86-1D, Pyridine, derivs.
                288-13-1D, Pyrazole, derivs. 289-95-2D, Pyrimidine, derivderivs. 7722-84-1, Hydrogen peroxide, biological studies
                                                289-95-2D, Pyrimidine, derivs.
     591-27-5D, derivs.
                                      9003-99-0, Peroxidase
     9000-30-0D, Guar gum, derivs.
                                                               9004-34-6D,
    Cellulose, derivs. 9055-15-6, Oxidoreductase
     17126-47-5D, Ferrocyanic acid, alkali metal salts
                                                           26062-79-3,
                   39421-75-5, Hydroxypropyl guar
                                                     80498-15-3, Laccase
    Merquat-100
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye prepn. comprising
        dialkyldiallylammonium cyclohomopolymer and quaternary ammonium
        polymer)
ΙT
     9055-15-6, Oxidoreductase
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye prepn. comprising
        dialkyldiallylammonium cyclohomopolymer and quaternary ammonium
        polymer)
     9055-15-6 HCAPLUS
RN
    Oxidoreductase (9CI)
                           (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
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L70 ANSWER 12 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:703874 HCAPLUS

DN 135:261998

TI Composition for oxidative dyeing of keratinic fibers comprising a C20 fatty alcohol and a nonionic oxyalkylene surfactant with HLB greater than 5

IN Cottard, Francois; Rondeau, Christine

PA L'Oreal, Fr.

SO Fr. Demande, 64 pp.

CODEN: FRXXBL

DT Patent

LA French

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PAT	rent	NO.		KI	ND	DATE			API	PLICAT	ION N	Ο.	DATE			
PI	FR	2803	196		A.	1	2001	0706		FR	1999-	16760		1999	1230		
	ΕP	1142	557		A.	1	2001	1010		EP	2000-	40347	3	2000	1211		
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB, G	GR, IT	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	SI,	LT,	LV,	FI,	RO									
	BR	2000	00658	84	Α		2001	0731		BR	2000-	6584		20003	1226		
	CN	1308	931		Α		2001	0822		CN	2000-	13737	0	20003	1229		
	US	2002	0109	70	A.	1	2002	0131		US	2001-	75075	7	20010	0102		
	JΡ	2001	20682	29	A:	2	2001	0731		JP	2001-	250		20010	0104		
PRAI	FR	1999	-167	60	Α		1999	1230									

OS MARPAT 135:261998

The title oxidative hair dye prepns. are claimed. An oxidant AΒ compn. contained fatty alc. 2.3, ethoxylated fatty alc. 0.6, fatty amide 0.9, glycerin 0.5, hydrogen peroxide 7.5, fragrance q.s., and water q.s. 100 g. A hair dye compn. contained Nafol 20-22 3, Nafolox 20-22 1.35, ethoxylated stearyl alc. 6, oleic acid 2.6, glycol distearate 2, propylene glycol 5, copra acid monoisopropanolamide 2, Aculyn-44 1.4, crosslinked polyacrylic acid 0.6, cationic polymers 3, Merquat-100 0.4, reducing agent 0.7, sequestering agents 0.2, 1,3-dihydroxybenzene 0.6, 1,4-diaminobenzene 0.5, 1-hydroxy-3-aminobenzene 0.1, 1-hydroxy-2aminobenzene 0.05, 1-hydroxy-4-aminobenzene 0.09, 6-hydroxybenzomorpholine 0.017, 1-.beta.-hydroxyethyloxy-2,4-diaminobenzene dihydrochloride 0.039, propylene glycol monobutyl ether 2.5, monoethanolamine 1.06, 20.5% ammonia 11.1, and water q.s. 100 g. One part of the dye compn. is mixed with 1.5 parts of oxidant compn. and applied on a 90% white hair for 30 min., the hair is then rinsed with water, washed with shampoo, rinsed and dried to obtain a clear chestnut color.

ST oxidative hair dye fatty alc surfactant

IT Alcohols, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(C18-24; oxidative hair dye prepn. comprising fatty alc. and nonionic oxyalkylene surfactant)

IT Polyurethanes, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(acrylic; oxidative hair dye prepn. comprising fatty alc. and nonionic oxyalkylene surfactant)

IT Bromates

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(alkali metal salts; oxidative hair dye prepn. comprising fatty alc. and nonionic **oxyalkylene** surfactant)

IT Phenols, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (alkyl, ethoxylated; oxidative hair dye prepn. comprising fatty alc. and nonionic oxyalkylene surfactant) ΙT Surfactants (amphoteric; oxidative hair dye prepn. comprising fatty alc. and nonionic oxyalkylene surfactant) IT Polyelectrolytes Surfactants (anionic; oxidative hair dye prepn. comprising fatty alc. and nonionic oxyalkylene surfactant) TΨ Polyelectrolytes Surfactants (cationic; oxidative hair dye prepn. comprising fatty alc. and nonionic oxyalkylene surfactant) IT Hair preparations (dyes, oxidative; oxidative hair dye prepn. comprising fatty alc. and nonionic oxyalkylene surfactant) IT Alcohols, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (fatty, ethoxylated; oxidative hair dye prepn. comprising fatty alc. and nonionic oxyalkylene surfactant) IT Surfactants (nonionic; oxidative hair dye prepn. comprising fatty alc. and nonionic oxyalkylene surfactant) ΙT Salts, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (of peroxy acids; oxidative hair dye prepn. comprising fatty alc. and nonionic oxyalkylene surfactant) Coupling agents Oxidizing agents Reducing agents Surfactants Thickening agents (oxidative hair dye prepn. comprising fatty alc. and nonionic oxyalkylene surfactant) Acrylic polymers, biological studies IΤ Enzymes, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (oxidative hair dye prepn. comprising fatty alc. and nonionic oxyalkylene surfactant) TT Carboxylic acids, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (polycarboxylic; oxidative hair dye prepn. comprising fatty alc. and nonionic oxyalkylene surfactant) IΤ Polyurethanes, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (polyether-; oxidative hair dye prepn. comprising fatty alc. and nonionic oxyalkylene surfactant) IT Alkenes, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (polymers with maleic anhydride and alkyl maleates; oxidative hair dye

surfactant)

prepn. comprising fatty alc. and nonionic oxyalkylene

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IT
     Quaternary ammonium compounds, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (polymers; oxidative hair dye prepn. comprising fatty alc. and nonionic
        oxyalkylene surfactant)
     Acrylic polymers, biological studies
IT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (polyurethane-; oxidative hair dye prepn. comprising fatty alc. and
        nonionic oxyalkylene surfactant)
IT
     Fats and Glyceridic oils, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (vegetable; oxidative hair dye prepn. comprising fatty alc. and
        nonionic oxyalkylene surfactant)
IT
     79-10-7D, Acrylic acid, polymers with dimethyldiallyammonium salts
     79-10-7D, Acrylic acid, polymers with dimethyldiallylammonium salts
     108-45-2D, 1,3-Benzenediamine, derivs. 110-16-7D, Maleic acid, alkyl
     derivs., polymers with maleic anhydride and olefins 110-86-1D, Pyridine,
               124-43-6 288-13-1D, Pyrazole, derivs. 591-27-5D, derivs. 629-98-1, Erucic alc
     derivs.
                                                          289-95-2D, Pyrimidine,
                                     629-98-1, Erucic alcohol
     derivs.
                                                                661-19-8,
     Behenic alcohol
                      7722-84-1, Hydrogen peroxide, biological studies
     9000-30-0D, Guar gum, derivs.
                                     9003-99-0, Peroxidase
                                                              9004-34-6D,
                         9005-00-9, Ethoxylated stearyl alcohol
     Cellulose, derivs.
                                 17126-47-5D, Ferrocyanic
     9055-15-6, Oxidoreductase
                                 26062-79-3, Merquat-100
     acid, alkali metal salts
                                                           39421-75-5.
     Hydroxypropyl guar
                          48042-45-1D, salts, polymers with acrylic acid
     80498-15-3, Laccase
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye prepn. comprising fatty alc.
        and nonionic oxyalkylene surfactant)
ΙT
     9055-15-6, Oxidoreductase
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (oxidative hair dye prepn. comprising fatty alc.
        and nonionic oxyalkylene surfactant)
RN
     9055-15-6 HCAPLUS
     Oxidoreductase (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
    ANSWER 13 OF 53 HCAPLUS COPYRIGHT 2002 ACS
L70
     2001:703873 HCAPLUS
ΑN
DN
     135:231478
ΤI
     Composition for oxidation dyeing of keratinic fibers, containing
     a thickening polymer comprising at least one fatty chain and a mono- or
     polyglycerol fatty alcohol
     Cottard, Francois; Rondeau, Christine
IN
     L'Oreal, Fr.
PΑ
     Fr. Demande, 58 pp.
SO
     CODEN: FRXXBL
DT
     Patent
LA
     French
     ICM A61K007-13
IC
     62-3 (Essential Oils and Cosmetics)
CC
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                            APPLICATION NO.
                                                             DATE
PΤ
                       A1
                            20010706
                                            FR 1999-16757
                                                             19991230
     FR 2803195
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20011010
                                         . EP 2000-403471
                                                               20001211
     EP 1142556
                        A1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     BR 2000006588
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                                             BR 2000-6588
                        Α
                                                               20001222
                                             CN 2000-137270
     CN 1303666
                        Α
                             20010718
                                                               20001229
                                             US 2001-750716
     US 2001023514
                        A1
                             20010927
                                                               20010102
     JP 2001206828
                        A2
                             20010731
                                             JP 2001-249
                                                               20010104
PRAI FR 1999-16757
                        Α
                             19991230
     MARPAT 135:231478
OS
AB
     The title oxidative hair dye prepns. are claimed. An oxidant
     compn. contained fatty alc. 2.3, ethoxylated fatty alc. 0.6, fatty
     amide 0.9, glycerin 0.5, hydrogen peroxide 7.5, fragrance q.s., and water q.s. 100 g. A hair dye compn. contained Nafol 20-22 3, a mixt.
     of polyglycerol C18-24 alcs. 1.35, cetearyl alc. comprising 2 mol of
     glycerol 4, cetearyl alc. comprising 6 mol of glycerol
     2, oleic acid 2.6, glycol distearate 2, propylene glycol 5, copra acid
     monoisopropanolamide 2, Aculyn-44 1.4, crosslinked polyacrylic acid 0.6,
     cationic polymers 3, Merquat-100 0.4, reducing agent 0.7, sequestering agents 0.2, 1,3-dihydroxybenzene 0.6, 1,4-diaminobenzene 0.5,
     1-hydroxy-3-aminobenzene 0.1, 1-hydroxy-2-aminobenzene 0.05,
     1-hydroxy-4-aminobenzene 0.09, 6-hydroxybenzomorpholine 0.017,
     1-.beta.-hydroxyethyloxy-2,4-diaminobenzene dihydrochloride 0.039,
     propylene glycol monobutyl ether 2.5, monoethanolamine 1.06, 20.5% ammonia
     11.1, and water q.s. 100 g. One part of the dye compn. is mixed
     with 1.5 parts of oxidant compn. and applied on a 90% white hair
     for 30 min., the hair is then rinsed with water, washed with shampoo,
     rinsed and dried to obtain a clear chestnut color.
ST
     oxidative hair dye thickening polymer; polyglycerol fatty alc oxidative
     hair dye
     Alcohols, biological studies
IT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (C16-18, polyglycerol derivs.; oxidative hair dye prepn. contg. a
        thickening polymer comprising at least one fatty chain and a mono- or
        polyglycerol fatty alc.)
ΙT
     Alcohols, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (C18-24; oxidative hair dye prepn. contq. a thickening polymer
        comprising at least one fatty chain and a mono- or polyglycerol fatty
ΙT
     Polyurethanes, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (acrylic; oxidative hair dye prepn. contg. a thickening polymer
        comprising at least one fatty chain and a mono- or polyglycerol fatty
        alc.)
     Bromates
TΤ
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (alkali metal salts; oxidative hair dye prepn. contg. a thickening
        polymer comprising at least one fatty chain and a mono- or polyglycerol
        fatty alc.)
ΙT
     Surfactants
        (amphoteric; oxidative hair dye prepn. contg. a thickening polymer
        comprising at least one fatty chain and a mono- or polyglycerol fatty
        alc.)
IT
     Polyelectrolytes
       Surfactants
        (anionic; oxidative hair dye prepn. contg. a thickening
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Page 34 polymer comprising at least one fatty chain and a mono- or polyglycerol fatty alc.) IT Polyelectrolytes Surfactants (cationic; oxidative hair dye prepn. contg. a thickening polymer comprising at least one fatty chain and a mono- or polyglycerol fatty alc.) ΙT Hair preparations (dyes, oxidative; oxidative hair dye prepn. contg. a thickening polymer comprising at least one fatty chain and a mono- or polyglycerol fatty IT Alcohols, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (fatty, polyglycerol derivs.; oxidative hair dye prepn. contg. a thickening polymer comprising at least one fatty chain and a mono- or. polyglycerol fatty alc.) ΙT Surfactants (nonionic; oxidative hair dye prepn. contg. a thickening polymer comprising at least one fatty chain and a mono- or polyglycerol fatty ΙT Salts, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (of peroxy acids; oxidative hair dye prepn. contq. a thickening polymer comprising at least one fatty chain and a mono- or polyglycerol fatty alc.) ΙT Coupling agents Oxidizing agents Reducing agents Surfactants Thickening agents (oxidative hair dye prepn. contg. a thickening polymer comprising at least one fatty chain and a mono- or polyglycerol fatty alc.) IT Acrylic polymers, biological studies Enzymes, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (oxidative hair dye prepn. contg. a thickening polymer comprising at least one fatty chain and a mono- or polyglycerol fatty alc.) ΙT Polyurethanes, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (polyether-; oxidative hair dye prepn. contg. a thickening polymer comprising at least one fatty chain and a mono- or polyglycerol fatty alc.) Alkenes, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (polymers with maleic anhydride and alkyl maleates; oxidative hair dye prepn. contg. a thickening polymer comprising at least one fatty chain and a mono- or polyglycerol fatty alc.) IT Quaternary ammonium compounds, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (polymers; oxidative hair dye prepn. contg. a thickening polymer

alc.) Acrylic polymers, biological studies IT RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

comprising at least one fatty chain and a mono- or polyglycerol fatty

TΤ

KOSS 09/852624 Page 35 (Uses) (polyurethane-; oxidative hair dye prepn. contg. a thickening polymer comprising at least one fatty chain and a mono- or polyglycerol fatty alc.) IT 108-31-6D, Maleic anhydride, polymers with olefins and alkyl maleates 108-45-2D, 1,3-Benzenediamine, derivs. 110-16-7D, Maleic acid, alkyl derivs., polymers with maleic anhydride and olefins 110-86-1D, Pyridine, 288-13-1D, Pyrazole, derivs. 289-95-2D, Pyrimidine, 124-43-6 derivs. derivs. 591-27-5D, derivs. 7722-84-1, Hydrogen peroxide, biological 9000-30-0D, Guar gum, derivs. 9003-99-0, Peroxidase studies 9004-34-6D, Cellulose, derivs. 9055-15-6, Oxidoreductase 17126-47-5D, Ferrocyanic acid, alkali metal salts 25618-55-7D, Polyglycerol, fatty alc. derivs. 26062-79-3, Merquat-100 39421-75-5, Hydroxypropyl guar 80498-15-3, Laccase RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (oxidative hair dye prepn. contg. a thickening polymer comprising at least one fatty chain and a mono- or polyglycerol fatty alc.) 9055-15-6, Oxidoreductase ΙT RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (oxidative hair dye prepn. contg. a thickening polymer comprising at least one fatty chain and a mono- or polyglycerol fatty alc.) 9055-15-6 HCAPLUS RN Oxidoreductase (9CI) CN (CA INDEX NAME) *** STRUCTURE DIAGRAM IS NOT AVAILABLE *** ANSWER 14 OF 53 HCAPLUS COPYRIGHT 2002 ACS L70 2001:703872 HCAPLUS ΑN DN 135:231477 Compositions for oxidative dyeing of keratinic fibers comprising ΤI a polymer with an alkyl chain and a C20 fatty alcohol Cottard, Francois; Rondeau, Christine ΙN L'Oreal, Fr. PA Fr. Demande, 58 pp. SO CODEN: FRXXBL DT Patent LA French IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN CNT 1

IAN. CNI I										
	PATENT NO.	KIND DATE	APPLICATION NO.	DATE						
ΡI	FR 2803197	A1 20010	706 FR 1999-16762	19991230						
	EP 1142555	A1 20011	010 EP 2000-403470	20001211						
	R: AT, BE,	CH, DE, DK,	ES, FR, GB, GR, IT, LI, I	LU, NL, SE, MC, PT,						
	IE, SI,	LT, LV, FI,	RO							
•	BR 2000006551	A 20010	731 BR 2000-6551	20001227						
	CN 1303665	A 20010	718 CN 2000-137256	20001229						
	US 2001023515	A1 20010	927 US 2001-750718	20010102						
	JP 2001220330	A2 20010	814 JP 2001-251	20010104						
PRAI	FR 1999-16762	A 19991	230							
OS	MARPAT 135.2314	77								

MARPAT 135:231477

AB The title oxidative hair dye prepns. are claimed. An oxidant compn. contained fatty alc. 2.3, ethoxylated fatty alc. 0.6, fatty amide 0.9, glycerin 0.5, hydrogen peroxide 7.5, fragrance q.s., and water q.s. 100 q. A hair dye compn. contained Nafol 20-22 3, Nafolox

20-22 1.35, ethoxylated stearyl alc. 6, oleic acid 2.6, glycol distearate 2, propylene glycol 5, copra acid monoisopropanolamide 2, Aculyn-44 1.4, crosslinked polyacrylic acid 0.6, cationic polymers 3, Merquat-100 0.4, reducing agent 0.7, sequestering agents 0.2, 1,3-dihydroxybenzene 0.6, 1,4-diaminobenzene 0.5, 1-hydroxy-3-aminobenzene 0.1, 1-hydroxy-2-aminobenzene 0.05, 1-hydroxy-4-aminobenzene 0.09, 6-hydroxybenzomorpholine 0.017, 1-.beta.-hydroxyethyloxy-2,4-diaminobenzene dihydrochloride 0.039, propylene glycol monobutyl ether 2.5, monoethanolamine 1.06, 20.5% ammonia 11.1, and water q.s. 100 g. One part of the dye compn. is mixed with 1.5 parts of oxidant compn. and applied on a 90% white hair for 30 min., the hair is then rinsed with water, washed with shampoo, rinsed and dried to obtain a clear chestnut color.

ST oxidative hair dye polymer fatty alc

IT Alcohols, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(C18-24; oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)

IT Polyurethanes, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(acrylic; oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)

IT Bromates

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(alkali metal salts; oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)

IT Phenols, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(alkyl, ethoxylated; oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)

IT Surfactants

(amphoteric; oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)

IT Polyelectrolytes

Surfactants

(anionic; oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)

IT Polyelectrolytes

Surfactants

(cationic; oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)

IT Hair preparations

(dyes, oxidative; oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)

IT Alcohols, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(fatty, ethoxylated; oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)

IT Surfactants

(nonionic; oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)

IT Salts, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(of peroxy acids; oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)

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IT
    Coupling agents
    Oxidizing agents
    Reducing agents
    Surfactants
     Thickening agents
        (oxidative hair dye prepn. comprising polymer with alkyl chain and
        fatty alc.)
    Acrylic polymers, biological studies
ΙT
    Enzymes, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye prepn. comprising polymer with alkyl chain and
        fatty alc.)
IT
    Carboxylic acids, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (polycarboxylic; oxidative hair dye prepn. comprising polymer with
        alkyl chain and fatty alc.)
ΙT
     Polyurethanes, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (polyether-; oxidative hair dye prepn. comprising polymer with alkyl
        chain and fatty alc.)
    Alkenes, biological studies
TΤ
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (polymers with maleic anhydride and alkyl maleates; oxidative hair dye
        prepn. comprising polymer with alkyl chain and fatty alc.)
    Quaternary ammonium compounds, biological studies
ΙT
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (polymers; oxidative hair dye prepn. comprising polymer with alkyl
        chain and fatty alc.)
    Acrylic polymers, biological studies
TΤ
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (polyurethane-; oxidative hair dye prepn. comprising polymer with alkyl
        chain and fatty alc.)
     Fats and Glyceridic oils, biological studies
ΙT
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (vegetable; oxidative hair dye prepn. comprising polymer with alkyl
        chain and fatty alc.)
     79-10-7D, Acrylic acid, polymers with dimethyldiallyammonium salts
ΙT
     108-45-2D, 1,3-Benzenediamine, derivs. 110-16-7D, Maleic acid, alkyl
                                                           110-86-1D, Pyridine,
     derivs., polymers with maleic anhydride and olefins
                          288-13-1D, Pyrazole, derivs.
                                                         289-95-2D, Pyrimidine,
     derivs.
               124-43-6
               591-27-5D, derivs.
                                    629-98-1, Erucic alcohol
     derivs.
                                                                661-19-8,
                       7722-84-1, Hydrogen peroxide, biological studies
     Behenic alcohol
                                     9003-99-0, Peroxidase
                                                              9004-34-6D,
     9000-30-0D, Guar gum, derivs.
                          9005-00-9, Ethoxylated stearyl alcohol
     Cellulose, derivs.
                                17126-47-5D, Ferrocyanic
     9055-15-6, Oxidoreductase
                                26062-79-3, Merquat-100
                                                          39421-75-5,
     acid, alkali metal salts
                          48042-45-1D, salts, polymers with acrylic acid
     Hydroxypropyl guar
     80498-15-3, Laccase
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (oxidative hair dye prepn. comprising polymer with
        alkyl chain and fatty alc.)
ΙT
     9055-15-6, Oxidoreductase
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RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.) 9055-15-6 HCAPLUS RN Oxidoreductase (9CI) CN (CA INDEX NAME) *** STRUCTURE DIAGRAM IS NOT AVAILABLE *** ANSWER 15 OF 53 HCAPLUS COPYRIGHT 2002 ACS L70 AN 2001:676561 HCAPLUS DN 135:246997 TI Oxidation dyeing composition for keratinous fibers with a particular paraphenylenediamine derivative and a particular direct dyeing agent IN Lang, Gerard PA L'Oreal, Fr. PCT Int. Appl., 49 pp. SO CODEN: PIXXD2 DTPatent LA French ICM A61K007-13 IC CC 62-3 (Essential Oils and Cosmetics) FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE 20010913 WO 2001-FR644 PΙ WO 2001066068 A1 20010305 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG FR 2805741 A1 20010907 FR 2000-2862 20000306 PRAI FR 2000-2862 20000306 Α OS MARPAT 135:246997 AΒ The invention concerns an oxidn. dyeing compn. for keratinous fibers, and in particular human keratinous fibers such as hair comprising, in a medium suitable for dyeing, at least an oxidn. base selected among certain substituted paraphenylenediamine derivs. and their addn. salts with an acid, and at least a synthetic direct dyeing agent selected among the azo, quinoid, triarylmethane, indoamino, azine dyes and/ or a natural dye. The invention also concerns a dyeing method using said compn A hair dye compn. contained 1-(4'-amino-3'-methylphenyl)-4hydroxy-2-methyl-pyrrolidine dihydrochloride 0.837, 2,4-diamino-1-(.beta.hydroxyethyloxy)-benzene 0.723, Miranol Al5 1, and water and excipients q.s. 100 g. Equal amt. of above compn. is mixed with 20 vol. hydrogen peroxide and applied on the hair for 30 min, the hair is then rinsed, washed with a shampoo, rinsed and dried to obtain a blue color. ST oxidative hair dye paraphenylenediamine direct dye ITBromates RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (alkali metal salts; oxidative hair dyes contg. paraphenylenediamine derivs. direct dyes) IT Polyelectrolytes Surfactants

(amphoteric; oxidative hair dyes contg. paraphenylenediamine derivs. direct dyes) IT Surfactants (anionic; oxidative hair dyes contq. paraphenylenediamine derivs. direct dyes) IT Polyelectrolytes Surfactants (cationic; oxidative hair dyes contg. paraphenylenediamine derivs. direct dyes) ΙT Dyes (direct; oxidative hair dyes contg. paraphenylenediamine derivs. direct dyes) IT Hair preparations (dyes, oxidative; oxidative hair dyes contg. paraphenylenediamine derivs. direct dyes) Alcohols, biological studies ΙT RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (fatty; oxidative hair dyes contg. paraphenylenediamine derivs. direct dyes) IT Dyes (natural; oxidative hair dyes contg. paraphenylenediamine derivs. direct dyes) IT Surfactants (nonionic; oxidative hair dyes contq. paraphenylenediamine derivs. direct dyes) IT Salts, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (of peroxy acids; oxidative hair dyes contg. paraphenylenediamine derivs. direct dyes) IT Solvents (org.; oxidative hair dyes contg. paraphenylenediamine derivs. direct dyes) IT Antioxidants Azo dyes Opacifiers Oxidizing agents Preservatives Thickening agents (oxidative hair dyes contg. paraphenylenediamine derivs. direct dyes) ΙT Acids, biological studies Alkali metal hydroxides Ceramides Cyclosiloxanes Enzymes, biological studies Paraffin oils Peroxysulfates Polysiloxanes, biological studies Vitamins RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (oxidative hair dyes contg. paraphenylenediamine derivs. direct dyes) Fats and Glyceridic oils, biological studies TΤ RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (vegetable; oxidative hair dyes contg. paraphenylenediamine derivs. direct dyes) IT 359841-61-5 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(Uses) (edioxidative hair dyes contg. paraphenylenediamine derivs. direct dyes) 72-48-0, Alizarine 81-54-9, Purpurin IT 81-48-1, solvent violet 13 89-25-8 90-15-3, 82-33-7 83-72-7, Lawsone 85-23-4, Spinulosin 91-56-5, Isatin 92-31-9, basic blue 17 .alpha. Naphthol 95-54-5 95-55-6 95-70-5 95-88-5 106-50-3 108-26-9 108-45-2 108-45-2D, 1,3-Benzenediamine, derivs. 108-46-3 110-86-1D, Pyridine, derivs. 116-85-8, disperse red 15 123-30-8 124-43-6 128-95-0, disperse 289-95-2D, Pyrimidine, derivs. violet 1 139-85-5 458-37-7, Curcumine 477-73-6, basic red 2 481-39-0, Juglone 533-31-3, Sesamol 533-31-3D, Sesamol, derivs. 548-62-9, basic violet 3 569-77-7, Purpurogallin 591-27-5, 3-Aminophenol 587-98-4, acid yellow 36 608-25-3 632 - 99 - 5, basic violet 14 633-03-4, basic green 1 633-96-5, acid orange 7 1151-98-0, Apigenidin 1220-94-6, disperse violet 4 1260-17-9, Carminic 1320-07-6, acid orange 24 1694-09-3, acid violet 49 1934-21-0, acid 2380-86-1, 1H-Indol-6-ol acid yellow 23 2380-94-1, 1H-Indol-4-ol 2390-60-5, basic blue 7 2475-45-8, disperse blue 1 2475-46-9, disperse blue 3 2580-56-5, basic blue 26 2650-18-2, acid blue 9 2706-28-7, 2835-95-2, 2-Methyl-5-aminophenol acid yellow 9 2872-48-2, disperse 3179-90-6, disperse blue 7 3486-30-4, acid blue 7 red 11 3567-66-6, 4368-56-3, acid blue 62 acid red 33 4430-18-6, acid violet 43 5735-53-5D, Benzomorpholine, derivs. 4664-16-8 4770-37-0 6441-93-6 7469-77-4 7556-37-8 7575-35-1 7722-84-1, Hydrogen peroxide, biological studies 9003-99-0, Peroxidase 9055-15-6, Oxidoreductase 12217-41-3, basic blue 22 12221-52-2, basic red 18499-92-8, Kermesic acid 13556-29-1 20721-50-0, disperse black 9 22 26381-41-9, basic brown 16 22366-99-0 23946-41-0 22036-97-1 47569-30-2 52136-23-9 36118-45-3D, Pyrazoline, derivs. 52136-25-1 55302-96-0 66422-95-5 68123-13-7, basic blue 99 68391-30-0, basic 68391-31-1, basic yellow 57 68651-46-7, Indigo (dye) red 76 80498-15-3, Laccase 69151-32-2 83763-47-7 93841-24-8 70643-19-5 99788-75-7 143525-64-8 154442-49-6 171662-44-5 143525-61-5 171662-53-6 176742-32-8, basic brown 17 200346-04-9 200346-06-1 200346-16-3 204700-85-6 227617-43-8 228268-53-9 228268-59-5 228268-69-7 228268-74-4 228268-76-6 228268-85-7 228268-87-9 228555-73-5 228555-75-7 228555-77-9 228555-69-9 228555-79-1 228555-81-5 228569-19-5 228569-22-0 228569-31-1 228569-39-9 228569-43-5 228569-47-9 228569-56-0 342013-25-6 359840-68-9 359840-69-0 359840-70-3 359840-71-4 359840-72-5 359840-73-6 359840-74-7 359840-75-8 359840-76-9 359840-77-0 359840-78-1 359840-79-2 359840-80-5 359840-81-6 359840-82-7 359840-83-8 359840-84-9 359840-85-0 359840-86-1 359840-87-2 359840-88-3 359840-89-4 359840-90-7 359840-91-8 359840-92-9 359840-93-0 359840-94-1 359840-95-2 359840-96-3 359840-97-4 359840-98-5 359840-99-6 359841-00-2 359841-01-3 359841-02-4 359841-03-5 359841-04-6 359841-05-7 359841-06-8 359841-07-9 359841-08-0 359841-09-1 359841-10-4 359841-11-5 359841-12-6 359841-13-7 359841-17-1 359841-14-8 359841-15-9 359841-16-0 359841-18-2 359841-22-8 359841-19-3 359841-20-6 359841-21-7 359841-23-9 359841-24-0 359841-25-1 359841-26-2 359841-27-3 359841-28-4 359841-30-8 359841-31-9 359841-32-0 359841-29-5 359841-33-1 359841-34-2 359841-35-3 359841-36-4 359841-37-5 359841-38-6 359841-39-7 359841-40-0 359841-41-1 359841-42-2 359841-43-3 359841-44-4 359841-45-5 359841-46-6 359841-47-7 359841-48-8 359841-50-2 359841-49-9 359841-51-3 359841-52-4 359841-53-5 359841-54-6 359841-55-7 359841-57-9 359841-56-8 359841-58-0 359841-59-1 359841-63-7 359841-62-6 359841-60-4 359841-64-8

359841-67-1

360069-60-9

359841-68-2

359841-69-3

359841-65-9

359850-56-9

359841-66-0

359868-06-7

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (oxidative hair dyes contg. paraphenylenediamine derivs. direct dyes) THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT RE (1) Anon; JP 11158048 A 1999 HCAPLUS (2) Anon; PATENT ABSTRACTS OF JAPAN 1999, V1999(11) (3) Fuji Photo Film Co Ltd; JP 11158048 A 1999 HCAPLUS (4) Henkel Kgaa; DE 19707545 A 1998 HCAPLUS (5) Oreal; EP 0673641 A 1995 HCAPLUS (6) Schwarzkopf Gmbh Hans; DE 19728335 A 1998 HCAPLUS (7) Squibb Bristol Myers Co; EP 0962452 A 1999 HCAPLUS IT 9055-15-6, Oxidoreductase RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (oxidative hair dyes contg. paraphenylenediamine derivs. direct dyes) 9055-15-6 HCAPLUS RN Oxidoreductase (9CI) CN (CA INDEX NAME) *** STRUCTURE DIAGRAM IS NOT AVAILABLE *** ANSWER 16 OF 53 HCAPLUS COPYRIGHT 2002 ACS 1.70 ΑN 2001:654637 HCAPLUS ĎΝ 135:215749 ΤI Keratin fiber dye compositions containing indolizine cationic derivatives as coupling agents IN Breton, Philippe; Segala, Fabienne; Lagrange, Alain PΑ L'oreal, Fr. Eur. Pat. Appl., 20 pp. SO CODEN: EPXXDW DTPatent LA French IC A61K007-13; C07D471-04 CC 62-3 (Essential Oils and Cosmetics) Section cross-reference(s): 27 FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE ______ ---------______ EP 1129690 A2 20010905 PΙ EP 2001-400430 20010219 EP 1129690 A3 20011128 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO FR 2805460 A1 20010831 FR 2000-2419 20000225 JP 2001270813 A2 20011002 JP 2001-51270 20010226 US 2001044974 US 2001-791822 20011129 Α1 20010226 PRAI FR 2000-2419 20000225 Α MARPAT 135:215749 OS AΒ The title oxidative hair dye compns. are disclosed. Thus, 7-methyl-2-phenyl-3-(2-pyridin-2-yl-ethyl)-indolizine was refluxed with di-Me sulfate in Et acetate for 2 h to obtain 1-methyl-2-[2-(7-methyl-2phenyl-indolizin-3-yl)-ethyl]-pyridinium (I). A hair dye compn. contained I 3x10-3, paratoluylenediamine 3x10-3 mole, water and excipients q.s. 100 g. Equal amt. of the compn. is mixed with 20 vol. hydrogen peroxide and applied on the hair for 30 min. The hair is then rinsed with water, washed with shampoo and dried to obtain a golden blond color.

oxidative hair dye indolizine deriv coupler

ST

ΙT

Bromates

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RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
      (Uses)
         (alkali metal salts; keratin fiber dye compns. contg.
         indolizine cationic derivs. as coupling agents)
     Hair preparations
IT
         (dyes, oxidative; keratin fiber dye compns. contq. indolizine
         cationic derivs. as coupling agents)
     Coupling agents
ΙT
     Oxidizing agents
         (keratin fiber dye compns. contg. indolizine cationic derivs.
         as coupling agents)
     Enzymes, biological studies
IT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
      (Uses)
         (keratin fiber dye compns. contg. indolizine cationic derivs.
         as coupling agents)
ΙT
     Salts, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
         (of peroxy acids; keratin fiber dye compns. contg. indolizine
         cationic derivs. as coupling agents)
ΙT
     92-65-9
                 93-05-0, N, N-Diethyl p-phenylenediamine 95-55-6, 2 aminophenol
     95-55-6D, derivs.
                            95-70-5
                                       99-98-9, N, N-Dimethyl p-phenylenediamine
     101-54-2 106-50-3, 1,4-Benzenediamine, biological studies 106-50 1,4-Benzenediamine, derivs. 108-45-2D, 1,3-Benzenediamine, derivs.
                                                                             106-50-3D,
     123-30-8, p-Aminophenol
                                  123-30-8D, derivs.
                                                           124-43-6
                                                                       148-71-0,
                                                 399-95-1, 4-Amino 3-fluorophenol
     4-Amino-N, N-diethyl-3-methyl aniline
     399-96-2, 4 amino 2 fluorophenol 537-65-5
615-66-7, 2-Chloro-p-phenylenediamine 1630-1
                                                          591-27-5D, derivs.
                                                   1630-11-1, 2,6-Diethyl
                                           2359-53-7 2835-96-3, 4-amino 2
     p-phenylenediamine
                             2359-52-6
                      2835-98-5, 2 amino 5-methylphenol 2835-99 5306-96-7, 2,3-Dimethyl-p-phenylenediamine
                                                                2835-99-6, 4 amino 3
     methylphenol
     methylphenol
                                                                         5862-80-6
     6393-01-7, 2,5-Dimethyl p-phenylenediamine 7218-02-2, 2,6-Dimethyl p-phenylenediamine 7575-35-1, N,N-Bis(.beta.-hydroxyethyl) p-phenylenediamine 7722-84-1, Hydrogen peroxide, biological studies
     9002-10-2, Tyrosinase 9003-99-0, Peroxidase 9055-15-6,
                         14791-78-7, 2-Fluoro p-phenylenediamine
     Oxidoreductase
                    15583-12-7
                                   17672-22-9, 2 amino 6-methylphenol
                                                                              35682-64-5
     15583-11-6
     35682-65-6
                    35691-87-3
                                   35691-91-9
                                                  47139-07-1
                                                                 47581-03-3
     52200-90-5, 4-amino 2 methoxyphenol
                                                 63969-43-7
                                                                73793-80-3,
                                                79352-72-0, 4-amino 2
     2-Hydroxymethyl p-phenylenediamine
     aminomethylphenol 80467-77-2, N-(2-Hydroxypropyl) p-phenylenediamine 80498-15-3, Laccase 93841-24-8, 2-.beta.-Hydroxyethyl p-phenylenediamine
     80498-15-3, Laccase 93841-24-8, 2-.beta.-Hydroxyethyl p-phenyler 97902-52-8, 2-Isopropyl p-phenylenediamine 104333-09-7, 4-Amino
     2-hydroxymethylphenol
                                 105293-89-8, N, N-Dipropyl p-phenylenediamine
     105607-68-9
                     110952-46-0, 4-Amino 2-(2-hydroxyethylaminomethyl)phenol
     128729-30-6
                     128729-31-7
                                      129697-50-3, 5-acetamido 2 aminophenol
     130582-53-5
                     135855-34-4
                                      135855-35-5
                                                      168202-61-7, 4 amino 3
                                                               358359-11-2
     hydroxymethylphenol
                              189261-56-1
                                               221110-58-3
     358359-13-4
                      358359-14-5
                                      358359-15-6
                                                      358359-16-7
                                                                      358359-17-8
     358359-18-9
                      358359-19-0
                                      358359-20-3
                                                      358359-21-4
                                                                      358359-22-5
     358359-23-6
                      358359-24-7
                                      358359-25-8
                                                      358359-26-9
                                                                      358359-27-0
     358359-28-1
                     358359-29-2
                                      358359-30-5
                                                      358359-31-6
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
      (Uses)
         (keratin fiber dye compns. contg.
         indolizine cationic derivs. as coupling agents)
TΤ
     358359-09-8P
                       358359-10-1P
     RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL
      (Biological study); PREP (Preparation); USES (Uses)
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(keratin fiber dye compns. contg. indolizine cationic derivs. as coupling agents) IT 77-78-1, Dimethylsulfate 79-04-9, Chloroacetic acid chloride n Methylimidazole 768-18-3, 2 methylindolizine 1337-81-1, Vinyl pyridine 26557-56-2, 7-Methyl-2-phenyl-indolizine RL: RCT (Reactant) (keratin fiber dye compns. contg. indolizine cationic derivs. as coupling agents) IT 358359-08-7P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (keratin fiber dye compns. contg. indolizine cationic derivs. as coupling agents) IT 9002-10-2, Tyrosinase 9055-15-6, Oxidoreductase RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (keratin fiber dye compns. contg. indolizine cationic derivs. as coupling agents) 9002-10-2 HCAPLUS RN CN Oxygenase, monophenol mono- (9CI) (CA INDEX NAME) *** STRUCTURE DIAGRAM IS NOT AVAILABLE *** RN 9055-15-6 HCAPLUS CN Oxidoreductase (9CI) (CA INDEX NAME) *** STRUCTURE DIAGRAM IS NOT AVAILABLE *** ANSWER 17 OF 53 HCAPLUS COPYRIGHT 2002 ACS L70 2001:654636 HCAPLUS ΑN 135:215748 DN TΤ Keratinous fiber dyeing composition comprising N-(2-hydroxybenzene) carbamate or N-(2-hydroxybenzene) urea derivatives as coupling agents Saunier, Jean-Baptiste; Vidal, Laurent IN PΑ L'oreal, Fr. SO Eur. Pat. Appl., 33 pp. CODEN: EPXXDW DTPatent LA French ICM A61K007-13 IC CC 62-3 (Essential Oils and Cosmetics) FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE ____ _____ EP 1129689 A2 20010905 EP 2001-400429 20010219 PΙ EP 1129689 А3 20011121 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO FR 2805159 20010824 FR 2000-2335 20000223 A1 JP 2001270814 JP 2001-49456 20010223 A2 20011002 US 2001034914 20011101 US 2001-790524 20010223 A1 PRAI FR 2000-2335 Α 20000223 MARPAT 135:215748 OS AB The title hair dye compns. are disclosed. A hair dye compn. contained para-aminophenol 0.73, (2-hydroxy-4aminophenyl)carbamate Et ester 1.31, water and excipients q.s. 100 g. Equal amt. of the compn. is mixed with 20 vol. hydrogen peroxide and applied on the hair for 30 min. The hair is then rinsed with water, washed with shampoo and dried to obtain copper blond color. ST hair dye hydroxybenzene carbamate deriv coupler; urea hydroxybenzene deriv hair dye coupling agent

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IT
     Bromates
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (alkali metal salts; keratinous fiber dyeing compn.
        comprising hydroxybenzene carbamate or hydroxybenzene urea derivs. as
        coupling agents)
IT
     Hair preparations
        (dyes, oxidative; keratinous fiber dyeing compn. comprising
        hydroxybenzene carbamate or hydroxybenzene urea derivs. as
        coupling agents)
     Coupling agents
ΙT
        (keratinous fiber dyeing compn. comprising hydroxybenzene
        carbamate or hydroxybenzene urea derivs. as coupling agents)
IT
     Enzymes, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (keratinous fiber dyeing compn. comprising hydroxybenzene
        carbamate or hydroxybenzene urea derivs. as coupling agents)
IT
     Salts, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (of peroxy acids; keratinous fiber dyeing compn. comprising
        hydroxybenzene carbamate or hydroxybenzene urea derivs. as
        coupling agents)
IT
     92-65-9
               93-05-0
                         95-55-6, 2-Aminophenol
                                                   95-70-5
                                                             99-98-9
                                                                        101-54-2
     106-50-3
                108-45-2D, 1,3-Benzenediamine, derivs.
                                                         123-30-8
                                                                      124-43-6
                                                     399-96-2, 4 amino
     148-71-0
                399-95-1, 4 amino 3 fluoro phenol
     2-fluorophenol
                      537-65-5
                                 591-27-5D, derivs.
                                                       615-66-7
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     1630-11-1
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                             2359-53-7
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                                                                   2835-96-3, 4
     amino 2 methyl phenol
                             2835-98-5, 2-Amino 5-methylphenol
                                                                   2835-99-6, 4
     amino 3 methyl phenol
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                                                                   7218-02-2
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                 7722-84-1, Hydrogen peroxide, biological studies
                             9003-99-0, peroxidase 9055-15-6,
     9002-10-2, tyrosinase
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                                    17672-22-9, 2-Amino 6-methylphenol
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                               27898-06-2
                                             28096-25-5
                                                          29785-47-5, 4 amino 2
     methoxymethyl phenol 34542-96-6
                                                       40783-78-6
                                          38910-17-7
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                                56021-27-3
                                             56836-51-2
     54381-16-7
                  55446-28-1
                                                          57718-28-2
                                79352-72-0, 4 amino 2 aminomethyl phenol
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                  80498-15-3, laccase
     80467-77-2
                                         83898-17-3
                                                      90661-81-7
                                                                    97902-52-8
     104333-09-7, 4 amino 2 hydroxymethyl phenol
                                                    105293-89-8
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     110952-46-0
                   119838-00-5
                                                              126335-43-1
                                  129697-50-3, 5-Acetamido-2-aminophenol
                   128729-31-7
     128729-30-6
                                 135855-35-5
                                                168202-61-7, 4 amino 3
     130582-53-5
                   135855-34-4
                            201599-07-7
                                           207568-58-9
                                                         221110-58-3
     hydroxymethyl phenol
     221110-59-4
                   232284-09-2
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                   357272-89-0
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                   357273-44-0
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     357273-48-4
                   357273-49-5
                                  357273-51-9
                                                357273-53-1
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     357273-55-3
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                                                              357273-59-7
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                   357273-66-6
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                   357273-71-3
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KOSS
       09/852624
                      Page 45
     357273-76-8
                   357273-77-9
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     357273-81-5
                   357273-82-6
                                  357273-83-7
                                                357273-84-8
                                                               357273-85-9
     357273-86-0
                   357273-87-1
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                   357273-92-8
     357273-91-7
                                  357273-93-9
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                   357273-97-3
     357273-96-2
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                                                357273-99-5
                                                               357274-00-1
                   357274-02-3
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                                  357274-03-4
                                                357274-04-5
                                                               357274-05-6
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                                                               357274-10-3
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                                  357274-08-9
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                   357274-12-5
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                   357274-29-4
                                  357274-30-7
                                                357274-31-8
                                                              357274-32-9
                   357274-34-1
                                  357276-31-4
     357274-33-0
                                                357276-32-5
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (keratinous fiber dyeing compn.
        comprising hydroxybenzene carbamate or hydroxybenzene urea derivs. as
        coupling agents)
ΙT
     9002-10-2, tyrosinase 9055-15-6, Oxidoreductase
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (keratinous fiber dyeing compn.
        comprising hydroxybenzene carbamate or hydroxybenzene urea derivs. as
        coupling agents)
RN
     9002-10-2 HCAPLUS
     Oxygenase, monophenol mono- (9CI)
                                        (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN
     9055-15-6 HCAPLUS
     Oxidoreductase (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     ANSWER 18 OF 53 HCAPLUS COPYRIGHT 2002 ACS
L70
     2001:489203 HCAPLUS
ΑN
DN
     135:81834
ΤI
     One-pack type post-foamable oxidation hair-dye compositions
     Tsujino, Yoshio; Aoki, Masahiro
ΙN
     Yamahatsu Sangyo Kaisha, Ltd., Japan
PA
     PCT Int. Appl., 15 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     Japanese
IC
     ICM A61K007-13
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                            APPLICATION NO.
                       ____
                             20010705
                                            WO 1999-JP7273
                                                             19991224
PΙ
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                       A1
            AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
             MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK,
             SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ,
                                     TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
AΒ
     Disclosed are one-pack type post-foamable oxidn. hair-dye compns
     . characterized by contg. uricase, uric acid, an oxidn. dye and
     a post-foaming agent. These compns. impart an excellent feel in
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using, achieve good performance and exert an excellent hair-dyeing effect.
     A hair dye compn. contained p-phenylenediamine 0.6,
     p-methylaminophenol sulfate 0.3, 2,4-diaminophenoxyethanol hydrochloride
     0.05, p-aminophenol 0.1, 5-amino-o-cresol 0.05, resorcinol 0.5,
     N-acetyl-L-cysteine 0.08, alkyl acrylate copolymer 2.5, sorbitol 3,
     polyoxyethylene dimethylglucoside 1, coco fatty acid polypeptide reaction
    products 1, monoethanolamine q.s. to pH 9.2, uricase (20 IU/mg) 1,
     isopentane 0.5, and distd. water q.s. to 100 %.
ST
     hair dye uricase urate org solvent
ΙT
     Hair preparations
        (dyes, oxidative; one-pack post-foamable oxidn. hair dyes contg.
        uricase and urate and org. solvents)
     69-93-2, Uric acid, biological studies
                                              74-98-6, Propane,
IT
    biological studies
                          75-28-5, Isobutane
                                              78-78-4, Isopentane
                                                                      106-97-8,
     Butane, biological studies
                                  109-66-0, Pentane, biological studies
     115-10-6, Dimethyl ether 9002-12-4, Uricase
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (one-pack post-foamable oxidn. hair dyes contg.
        uricase and urate and org. solvents)
RE.CNT
       18
              THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Koike Kagaku K K; JP 10316532 A 1998 HCAPLUS
(2) Kyowa Hakko Kogyo Kabushikigaisha; US 4961925 A HCAPLUS
(3) Kyowa Hakko Kogyo Kabushikigaisha; JP 63246313 A HCAPLUS
(4) Kyowa Hakko Kogyo Kabushikigaisha; WO 8807360 A1 HCAPLUS
(5) Kyowa Hakko Kogyo Kabushikigaisha; EP 310675 A1 1989 HCAPLUS
(6) Mandom Corp; JP 977629 A 1997
(7) Mandom Corp; JP 977630 A 1997
(8) Novo Nordisk; WO 9915137 Al 1999 HCAPLUS
(9) Yamahatsu Sangyo Kaisha Ltd; JP 08217652 A HCAPLUS
(10) Yamahatsu Sangyo Kaisha Ltd; JP 10298027 A HCAPLUS
(11) Yamahatsu Sangyo Kaisha Ltd; CN 1132623 A HCAPLUS
(12) Yamahatsu Sangyo Kaisha Ltd; CN 1200264 A HCAPLUS
(13) Yamahatsu Sangyo Kaisha Ltd; CA 2150596 A HCAPLUS
(14) Yamahatsu Sangyo Kaisha Ltd; US 6027719 A HCAPLUS
(15) Yamahatsu Sangyo Kaisha Ltd; AU 6194998 Al
(16) Yamahatsu Sangyo Kaisha Ltd; AU 9536624 Al HCAPLUS
(17) Yamahatsu Sangyo Kaisha Ltd; EP 716846 Al 1996 HCAPLUS
(18) Yamahatsu Sangyo Kaisha Ltd; EP 875241 A2 1998 HCAPLUS
TT
     9002-12-4, Uricase
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (one-pack post-foamable oxidn. hair dyes contg.
        uricase and urate and org. solvents)
RN
     9002-12-4 HCAPLUS
CN
     Oxidase, urate (9CI)
                          (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
    ANSWER 19 OF 53 HCAPLUS COPYRIGHT 2002 ACS
L70
AN
     2001:472447 HCAPLUS
DN
     135:66017
     Hair dye aerosol compositions containing water-soluble polymers
TI
     Noguchi, Mutsumi; Onuki, Takeshi; Mitamura, Joji
IN
PΑ
     Lion Corporation, Japan
SO
     PCT Int. Appl., 34 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     Japanese
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ICM A61K007-13
IC
     62-3 (Essential Oils and Cosmetics)
CC
FAN.CNT 2
     PATENT NO.
                      KIND DATE
                                            APPLICATION NO.
                                                             DATE
                            -----
                                            -----
                                                             _____
    WO 2001045656
                      A1
                            20010628
                                            WO 2000-JP8987
                                                             20001219
PΙ
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             HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
             LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD,
             SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,
             ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     JP 2001172142
                       Α2
                             20010626
                                            JP 1999-360313
                                                              19991220
                                            JP 2000-385014
     JP 2001240520
                       Α2
                             20010904
                                                              20001219
PRAI JP 1999-360313
                       Α
                             19991220
     JP 1999-360797
                       Α
                             19991220
os
    MARPAT 135:66017
    Disclosed is a one-pack aerosol-type hair dye compn. contg. an
AB
     oxidn. dye and an oxidizing enzyme, characterized by further contg. at
     least one water-sol. polymer selected from among hydroxypropyl cellulose,
    CM-cellulose, xanthan gum, guar gum, locust bean gum, gum arabic,
     tragacanth gum, karaya gum, gellan gum, pectin, carrageenan, furcellaran,
     alginic acid and salts thereof, hyaluronic acid and salts thereof,
     chondroitin sulfate and salts thereof, ethylene oxide polymers,
    polyacrylic acid and salts thereof, acrylic acid copolymers and salts
     thereof, polyvinylpyrrolidone, vinylpyrrolidone copolymers, polyvinyl
     acetate, vinyl acetate copolymers and carboxyvinyl polymers. A hair dye
     aerosol compn. contg. p-phenylenediamine 1.5, p-aminophenol 0.1,
    methaphenylenediamine 0.15, hydroxypropyl cellulose (Niso HPC) 5, ethanol
     5, lactic acid 0.5, oleic acid 0.1, sodium polyoxyethylene
     lauryl ether sulfate 0.2, laccase 0.3, monoethanol amine and water q.s. to
     100 % was prepd.
ST
    hair dye aerosol water sol polymer
IT
     Surfactants
        (Amides; hair dye aerosol compns. contg. water-sol. polymers
        and oxidizing enzymes and amide surfactants)
IT
     Vinyl compounds, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (carboxy-contg., polymers; hair dye aerosol compns. contg.
        water-sol. polymers and oxidizing enzymes)
IT
     Hair preparations
        (dyes; hair dye aerosol compns. contg. water-sol. polymers
        and oxidizing enzymes)
     Polyoxyalkylenes, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (hair dye aerosol compns. contq. water-sol. polymers and
        oxidizing enzymes)
ΙT
     Amides, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (surfactants; hair dye aerosol compns. contg. water-sol.
        polymers and oxidizing enzymes and amide surfactants)
TΤ
     Polymers, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
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(water-sol.; hair dye aerosol compns. contg. water-sol.
        polymers and oxidizing enzymes)
     75-21-8D, Ethylene oxide, polymers
                                          79-10-7, Acrylic acid, biological
IT
               88-12-0D, copolymers 108-05-4D, Vinyl acetate, copolymers
     studies
                                                     9000-21-9, Furcellaran
     9000-01-5, Gum arabic
                             9000-07-1, Carrageenan
                           9000-36-6, Karaya gum 9000-40-2, Locust bean gum
     9000-30-0, Guar gum
                                 9000-69-5, Pectin 9002-12-4, Uricase
     9000-65-1, Tragacanth gum
     9003-01-4, Polyacrylic acid 9003-04-7, Aronvis S 9003-20-7, Polyvinyl
               9003-39-8, luviskol K90
                                         9003-99-0, Peroxidase
                                                                 9004 - 32 - 4
     CM-cellulose
                    9004-61-9, Hyaluronic acid
                                                9004-64-2, Nisso HPC
                               9007-28-7, Chondroitin sulfate
     9005-32-7, Alginic acid
                                                                11138-66-2,
     Xanthan gum 25322-68-3, polyox WSR-303
                                               71010-52-1, Gellan gum
                          96827-24-6, carbopol 1342
     80498-15-3, Laccase
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (hair dye aerosol compns. contq.
        water-sol. polymers and oxidizing enzymes)
     137-16-6, N-Lauroyl-sarcosine sodium salt
ΙT
                                                16693-53-1,
     N-Lauroyl-sarcosine triethanolamine salt
                                               21539-58-2,
    N-Lauroyl-N-methyl-.beta.-alanine sodium salt
                                                     61538-73-6,
    N-Lauroyl-.beta.-alanine triethanolamine salt
                                                     89353-55-9,
     N-Lauroyl-N-methyl-.beta.-alanine triethanolamine salt
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (hair dye aerosol compns. contg. water-sol. polymers and
        oxidizing enzymes and amide surfactants)
              THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
RE
(1) Lion Corporation; JP 1160454 A
(2) Lion Corporation; EP 958806 A1 HCAPLUS
(3) Lion Corporation; WO 9856335 Al 1998 HCAPLUS
(4) Yamahatsu Sangyo K K; JP 08217652 A HCAPLUS
(5) Yamahatsu Sangyo K K; CN 1132623 A HCAPLUS
(6) Yamahatsu Sangyo K K; CA 2150596 A HCAPLUS
(7) Yamahatsu Sangyo K K; AU 9536624 A1 HCAPLUS
(8) Yamahatsu Sangyo K K; EP 716846 Al 1996 HCAPLUS
IT
     9002-12-4, Uricase
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (hair dye aerosol compns. contg.
        water-sol. polymers and oxidizing enzymes)
RN
     9002-12-4 HCAPLUS
     Oxidase, urate (9CI)
CN
                          (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
T.70
    ANSWER 20 OF 53 HCAPLUS COPYRIGHT 2002 ACS
AN
     2000:865148 HCAPLUS
DN
     134:32767
ΤI
     Composition for oxidative dying of keratinous fibers comprising
     oxidation base and an oxido-reductase enzyme
IN
     Plos, Gregory; Kravtchenko, Sylvain
PA
     L'oreal, Fr.
SO
     Eur. Pat. Appl., 16 pp.
     CODEN: EPXXDW
DT
     Patent
LA
     French
     ICM A61K007-13
TC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
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KIND DATE PATENT NO. APPLICATION NO. DATE ------____ -----A1 20001206 EP 2000-401362 EP 1057471 20000518 PΙ R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO FR 2794365 20001208 FR 1999-7092 19990604 A1 JP 2001031538 A2 20010206 JP 2000-166125 20000602 PRAI FR 1999-7092 Α 19990604 os MARPAT 134:32767 An oxidative hair dye prepn. contg. an oxidn. base and an oxido-reductase AB enzyme is disclosed (Markush structures given). A hair dye prepn. contained D-alanine oxidase 2000 U, para-phenylenediamine 0.324, 1-amino-2-methoxy-4,5-methylenedioxy benzene 0.611, D-alanine 0.535, 2-amino-2-methyl-1-propanol q.s. pH = 9, and water q.s. 100 g. The compn. produced a dull golden color. oxidative hair dye base oxidoreductase ST enzyme IT Coupling agents (compn. for oxidative dying of keratinous fibers comprising oxidn. base and oxido-reductase enzyme) ΙT Enzymes, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (compn. for oxidative dying of keratinous fibers comprising oxidn. base and oxido-reductase enzyme) IΤ Hair preparations (dyes, oxidative; compn. for oxidative dying of keratinous fibers comprising oxidn. base and oxido-reductase enzyme) 93-05-0 IT 89-25-8 90-15-3, .alpha.-Naphthol 92-65-9 95-55-6, 2-Aminophenol 95-55-6D, O-Aminophenol, derivs. 95-70-5 95-88-5, 99-98-9 101-54-2 4-Chloro1, 3-Dihydroxybenzene 106-50-3, 106-50-3D, 1,4-Benzenediamine, 1,4-Benzenediamine, biological studies 108-45-2, 1,3-Diamino benzene, biological studies derivs. 108-26-9 108-46-3, 1,3-Dihydroxybenzene, biological studies 110-86-1D, Pyridine, derivs., biological studies 123-30-8D, p-Aminophenol, derivs. 289-95-2D, Pyrimidine, derivs. 338-69-2, D-Alanine 399-95-1, 399-96-2 533-31-3, Sesamol 4-Amino-3-fluorophenol 537-65-5 615-66-7, 2-Chloro-p-phenylenediamine 2380-86-1, 1H-Indol-6-ol 2380-94-1, 591-27-5, 3-Aminophenol 608-25-3 2359-53-7 2359-52-6 1630-11-1 2835-95-2, 2-Methyl 5-aminophenol 2835-96-3, 1H-Indol-4-ol 2835-98-5, 2-Amino-5-methylphenol 2835-4664-16-8 4770-37-0, 6-Hydroxyindoline 4-Amino-2-methylphenol 2835-99-6, 4-Amino-3-methylphenol 5306-96-7, 2,3-Dimethyl-p-phenylenediamine 5862-80-6 6393-01-7 74-88-4, reactions 97-60-9 100-35-6 106-58-1, 1,4-Dimethylpiperazine ΙT 108-24-7, Acetic anhydride 7647-01-0, Hydrochloric acid, reactions RL: RCT (Reactant) (oxidative hair dye compns. contg. cationic coupling agent) 109-70-6P, 1-Bromo-3-chloropropane ΙT 79858-72-3P 79873-86-2P 244779-74-6P 244779-76-8P 244779-77-9P 244779-78-0P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)

- (oxidative hair dye compns. contg. cationic coupling agent)
- THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT RE
- (1) Farbenfabriken Bayer Ag; BE 639047 A HCAPLUS
- (2) Nippon Rinsho Kagakkai; RINSHO KAGAKU 1987, V16(2), P106
- (3) Ohsawa, S; Application of new synthetic substrate for estimation of serum cholinesterase activity Measurement of pseudo-ChE activity using the new

```
substrate (3-4-dihydroxybenzoylcholine) 1988, 5, HCAPLUS
(4) Oreal; FR 2520358 A 1983 HCAPLUS
     9055-15-6, Oxidoreductase
IT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye compns. contg.
        cationic coupling agent)
     9055-15-6 HCAPLUS
RN
     Oxidoreductase (9CI)
                          (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
    ANSWER 29 OF 53 HCAPLUS COPYRIGHT 2002 ACS
L70
     1999:464164 HCAPLUS
AN
DN
     131:120589
TΙ
    Hair dye composition containing a laccase
    Lang, Gerard; Cotteret, Jean
IN
PA
     L'Oreal, Fr.
SO
     PCT Int. Appl., 37 pp.
     CODEN: PIXXD2
DT
     Patent
     French
LA
     ICM A61K007-13
IC
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO.
                                                             DATE
                            _____
                      ____
                                                             19981218
ΡI
    WO 9936035
                      A1
                            19990722
                                           WO 1998-FR2794
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG,
             KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
             NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
             UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA,
                    GN, GW, ML, MR, NE, SN, TD, TG
     FR 2773477
                       Al
                            19990716
                                           FR 1998-254
                                                             19980113
    FR 2773477
                       B1
                            20010223
                                           AU 1999-17666
    AU 9917666
                       A1
                            19990802
                                                             19981218
    AU 729022
                       B2
                            20010125
    BR 9814740
                       Α
                            20001017
                                           BR 1998-14740
                                                             19981218
                            20001102
                                           EP 1998-962518
    EP 1047377
                       A1
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                       В1
                            20010627
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
    AT 202469
                       F.
                            20010715
                                           AT 1998-962518
                                                             19981218
    ES 2161074
                       Т3
                            20011116
                                           ES 1998-962518
                                                             19981218
PRAI FR 1998-254
                       Α
                            19980113
    WO 1998-FR2794
                       W
                            19981218
AB
     The invention concerns a ready-to-use compn. for dyeing human
     keratinous fibers and more particularly human hair, comprising (a) at
     least an enzyme such as laccase; (b) at least a cationic substance or
     particular amphoteric polymer; (c) at least an oxidn. coloring agent, as
    well as the dyeing methods using said compn.
ST
    hair dye laccase formulation
IT
     Polysiloxanes, biological studies
     RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); PEP
     (Physical, engineering or chemical process); BIOL (Biological study); PROC
     (Process); USES (Uses)
        (3-[(2-aminoethyl)amino]-2-methylpropyl Me, di-Me; hair dye
```

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compn. contg. a laccase)
IT
     Polysiloxanes, biological studies
     RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); PEP
     (Physical, engineering or chemical process); BIOL (Biological study); PROC
     (Process); USES (Uses)
        ([(aminoethyl)amino]propyl hydroxy, di-Me; hair dye compn.
        contg. a laccase)
IT
     Polysiloxanes, biological studies
     RL: BUU (Biological use, unclassified); PEP (Physical, engineering or
     chemical process); BIOL (Biological study); PROC (Process); USES (Uses)
        (cationic; hair dye compn. contg. a laccase)
IT
     Polymers, biological studies
     RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)
        (co-, dimethyldiallylammonium halide; hair dye compn. contg.
        a laccase)
IT
     Hair preparations
        (dyes; hair dye compn. contg. a laccase)
IT
     Oxidation
        (enzymic; hair dye compn. contg. a laccase)
IT
     Antioxidants
     Buffers
       Coupling agents
     Dispersing agents
     Opacifiers
     Perfumes
     Permeation enhancers
     Preservatives
     Sequestering agents
     Surfactants
     Thickening agents
        (hair dye compn. contg. a laccase)
     Enzymes, biological studies
IT
     RL: BAC (Biological activity or effector, except adverse); BUU (Biological
     use, unclassified); NUU (Other use, unclassified); PEP (Physical,
     engineering or chemical process); BIOL (Biological study); PROC (Process);
     USES (Uses)
        (hair dye compn. contq. a laccase)
ΙΤ
     Keratins
     RL: BPR (Biological process); PRP (Properties); BIOL (Biological study);
     PROC (Process)
        (hair dye compn. contg. a laccase)
ΙT
     Paraffin oils
     Polymers, biological studies
     Vitamins
     RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); PEP
     (Physical, engineering or chemical process); BIOL (Biological study); PROC
     (Process); USES (Uses)
        (hair dye compn. contq. a laccase)
ΙT
     Chlorophylls, biological studies
     RL: MFM (Metabolic formation); BIOL (Biological study); FORM (Formation,
     nonpreparative)
        (laccases of plants producing; hair dye compn. contg. a
        laccase)
ΙT
     Agaricus bisporus
     Anacardiaceae
     Apple
     Aspergillus nidulans
     Avocado (Persea americana)
     Banana (Musa)
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Botrytis cinerea Carrot Catharanthus roseus Ceriporiopsis subvermispora Cerrena unicolor Chaetomium thermophilum Cladosporium cladosporioides Coffee (Coffea) Coprinus cinereus Dichomitus squalens Fomes fomentarius Ganoderma lucidum Ginkqo biloba Glomerella cingulata Heterobasidion annosum Horse chestnut (Aesculus) Iris (plant) Lacquer tree Lactarius piperatus Maple (Acer pseudoplatanus) Monotropa hypopitys Myceliophthora thermophila Neurospora crassa Panaeolus papilionaceus Panaeolus sphinctrinus Peach (Prunus persica) Phellinus noxius Pistacia palaestina Pleurotus ostreatus Podocarpaceae Podospora anserina Polyporus pinsitus Potato (Solanum tuberosum) Pyricularia oryzae Rhizoctonia solani Rigidoporus lignosus Rosemary Russula delica Schizophyllum commune Scytalidium Thelephora terrestris Trametes hirsuta Trametes versicolor Vinca minor (laccases of; hair dye compn. contg. a laccase) IT Solvents (org.; hair dye compn. contg. a laccase) 2835-95-2, 2-Methyl 5-aminophenol RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses) (coupling agent; hair dye compn. contg. a laccase) IT 26161-33-1, Poly(methacryloyloxyethyltrimethylammonium chloride) 35429-19-7 RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses) (cross-linked; hair dye compn. contg. a laccase) ΙT 9003-99-0, Peroxidase **9055-15-6**, **Oxidoreductase** RL: BAC (Biological activity or effector, except adverse); BUU (Biological use, unclassified); NUU (Other use, unclassified); PEP (Physical,

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engineering or chemical process); BIOL (Biological study); PROC (Process);
    USES (Uses)
        (hair dye compn. contg. a laccase)
IT
     80498-15-3, Laccase
     RL: BAC (Biological activity or effector, except adverse); BUU (Biological
    use, unclassified); PEP (Physical, engineering or chemical process); BIOL
     (Biological study); PROC (Process); USES (Uses)
        (hair dye compn. contg. a laccase)
IT
     88-12-0D, polymeric derivs. 89-25-8
                                             90-15-3, .alpha.-Naphthol
     95-54-5D, 1,2-Benzenediamine, derivs.
                                             95-55-6D, derivs.
                                                                95-88-5,
     4-Chloro-1, 3-dihydroxybenzene 106-50-3D, 1, 4-Benzenediamine, derivs.
     108-26-9
               108-45-2, 1,3-Benzenediamine, biological studies 108-45-2D,
     1,3-Benzenediamine, derivs.
                                  108-46-3, 1,3-Dihydroxybenzene, biological
              108-46-3D, 1,3-Benzenediol, derivs. 123-30-8D, derivs.
    studies
     533-31-3, Sesamol
                        591-27-5, 3-Aminophenol
                                                  591-27-5D, derivs.
     608-25-3, 1,3-Dihydroxy-2-methylbenzene
                                             2380-86-1, 6-Hydroxyindole
     4664-16-8, 2,6-Dihydroxy-4-methylpyridine 53694-17-0, Merquat 280
     55302-96-0
                  66422-95-5, 2,4-Diaminophenoxyethanol dihydrochloride
    70643-19-5
                  81892-72-0 83763-47-7
                                          93846-05-0
                                                        197179-33-2, Oramix
    CG110
            231958-91-1
    RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); PEP
     (Physical, engineering or chemical process); BIOL (Biological study); PROC
     (Process); USES (Uses)
        (hair dye compn. contg. a laccase)
                                   26590-05-6, Acrylamide-
IT
    88-12-0D, cationic copolymers
    diallyldimethylammonium chloride copolymer 57564-45-1
                                                               98616-25-2,
                       223104-80-1
    Polyquaternium-24
    RL: BUU (Biological use, unclassified); PEP (Physical, engineering or
    chemical process); BIOL (Biological study); PROC (Process); USES (Uses)
        (hair dye compn. contg. a laccase)
             THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
RE
(1) Oreal; EP 0557203 A 1993 HCAPLUS
(2) Oreal; FR 2694018 A 1994 HCAPLUS
(3) Oreal; EP 0673641 A 1995 HCAPLUS
(4) Perma Sa; EP 0504005 A 1992 HCAPLUS
ΙT
    9055-15-6, Oxidoreductase
    RL: BAC (Biological activity or effector, except adverse); BUU (Biological
    use, unclassified); NUU (Other use, unclassified); PEP (Physical,
     engineering or chemical process); BIOL (Biological study); PROC (Process);
    USES (Uses)
        (hair dye compn. contg. a laccase)
     9055-15-6 HCAPLUS
RN
    Oxidoreductase (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L70
    ANSWER 30 OF 53 HCAPLUS COPYRIGHT 2002 ACS
     1999:401531 HCAPLUS
AN
DN
    131:49211
ΤI
    Oxidative hair dye preparations containing pyrazolo-azole derivatives
    Vidal, Laurent; Maubru, Mireille
IN
    L'oreal, Fr.
PA
    Eur. Pat. Appl., 39 pp.
SO
    CODEN: EPXXDW
DT
     Patent
LA
     French
IC
     ICM A61K007-13
     ICS C07D487-04
    C07D487-04, C07D249-00, C07D231-00; C07D487-04, C07D257-00, C07D231-00;
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CC
     62-4 (Essential Oils and Cosmetics)
     Section cross-reference(s): 28
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                           APPLICATION NO.
                                                            DATE
                           19990623
                                           EP 1998-402939
PΙ
    EP 923929
                      A1
                                                            19981125
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     FR 2772379
                      A1
                            19990618
                                           FR 1997-15947
                                                            19971216
     FR 2772379
                            20000211
                       В1
     JP 11263790
                       A2
                            19990928
                                           JP 1998-356792
                                                            19981215
     JP 3135536
                       B2
                            20010219
     US 2002007520
                       A1
                            20020124
                                           US 1998-212578
                                                            19981216
PRAI FR 1997-15947
                       Α
                            19971216
OS
    MARPAT 131:49211
AΒ
     The title compds. are prepd. for use in oxidative hair dye compns
        Thus, 1H-7-amino-3, 6-dimethylpyrazolo[3, 2-c]-1, 2, 4-triazole
     dihydrochloride (I) was prepd. by hydrogenation of 1H-7-nitro-3,6-
     dimethylpyrazolo[3,2-c]-1,2,4-triazole over Pd/C in presence of a soln. of
     ethanolic HCl. A hair dye prepn. contained I 0.672, resorcin 0.330,
    benzylic acid 2, PEG 3, ethanol 18, Oramix CG110 6, 20% ammonia 10, sodium
    metabisulfite 0.208, sequestrant q.s. and water q.s. 100 \ g. At the time
     of use the prepn. is mixed with equal amt. of 6.10-3 mol% ammonium
     persulfate and applied on the hair for 30 min. The hair is then rinsed,
    washed with a shampoo, and dried to obtain an iris color.
ST
    oxidative hair dye pyrazoloazole deriv
ΙT
    Salts, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (of peroxy acids; oxidative hair dye prepns. contg. pyrazolo-azole
        derivs.)
IT
    Coupling agents
        (oxidative hair dye prepns. contg. pyrazolo-azole derivs.)
IT
     108-46-3D, 1,3-Benzenediol, derivs.
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (meta-; oxidative hair dye prepns. contg. pyrazolo-azole derivs.)
               90-15-3, .alpha.-Naphthol 95-55-6D, derivs.
IT
                                                              95-88-5
               108-45-2, 1,3-Benzenediamine, biological studies
                                                                  108-45-2D,
     1,3-Benzenediamine, derivs. 108-46-3, 1,3-Benzenediol, biological
              123-30-8D, derivs.
                                    124-43-6 533-31-3, Sesamol
                                                                   591-27-5
     studies
                                   2380-86-1, 6-Hydroxyindole
     591-27-5D, derivs.
                          608-25-3
                                                                  2380-94-1,
     4-Hydroxyindole 2835-95-2, 2-Methyl-5-aminophenol
                                                           4664-16-8
     4770-37-0, 6-Hydroxyindoline
                                    7556-37-8
                                                7722-84-1, Hydrogen peroxide,
    biological studies
                          9003-99-0, Peroxidase 9055-15-6,
    Oxidoreductase
                      10035-10-6D, HydroBromic acid, alkali metal salts
     30569-52-9
                  55302-96-0
                               70643-19-5
                                            81892-72-0
                                                        83763-47-7
     93691-22-6
                  93846-05-0
                               94216-82-7
                                            111628-46-7
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     227610-79-9
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                                 227610-87-9
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                                 227611-02-1
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                                                             227611-09-8
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                                               227611-13-4
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C07D487-04, C07D235-00, C07D231-00; C07D487-04, C07D231-00, C07D231-00

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KOSS
       09/852624
                     Page 55
                   227611-16-7
     227611-15-6
                                  227611-17-8
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                                  227611-47-4
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     227611-50-9, 1H-Imidazo[1,2-b]pyrazol-7-amine
                                                      227611-51-0
                                                                    227611-52-1
     227611-53-2
                   227611-54-3
                                  227611-55-4
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                   227611-64-5
                                  227611-65-6
     1H-Imidazo[1,2-b]pyrazole-6,7-diamine
                                              227611-67-8
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     227611-69-0
                   227611-70-3
                                  227611-71-4
                                                227611-72-5
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                                  227611-76-9
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     227611-74-7
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     227611-79-2
                   227611-80-5
                                 227611-81-6
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye prepns. contg. pyrazolo-azole
        derivs.)
ΙT
     227611-82-7P
                    227611-85-0P
                                   227611-90-7P
     RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (oxidative hair dye prepns. contg. pyrazolo-azole derivs.)
ΙT
     78-39-7, Ethyl orthoacetate
                                  104-15-4, reactions
                                                         108-24-7, Acetic
     anhydride
                 110-46-3, Isopentyl nitrite
                                                124-41-4, Sodium methylate
     621-62-5, Chloroacetaldehyde diethylacetal
                                                   1118-61-2,
                                                       4755-81-1, Methyl
     3-Aminocrotonitrile
                           2231-57-4, Thiocarbazide
     2-chloroacetoacetate
                            5470-11-1, Hydroxylamine hydrochloride
                                                                      7697-37-2,
     Nitric acid, reactions
                              7727-54-0, Ammonium persulfate
                                                               10025-87-3,
     Phosphoryl chloride
                           14011-37-1, Hydrazine hydrochloride
                                                                  31230-17-8,
     5-Amino-3-methylpyrazole
     RL: RCT (Reactant)
        (oxidative hair dye prepns. contg. pyrazolo-azole derivs.)
ΙT
                   42351-83-7P
                                42351-84-8P 83725-05-7P 93846-27-6P
     42351-81-5P
     111628-45-6P
                    126782-74-9P
                                    197356-57-3P
                                                   227611-84-9P
     227611-87-2P
                    227611-88-3P
                                    227611-89-4P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
        (oxidative hair dye prepns. contg. pyrazolo-azole derivs.)
RE.CNT
              THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) L'Oreal; WO 9735551 A 1997 HCAPLUS
(2) Wella; WO 9307849 A 1993 HCAPLUS
IT
     9055-15-6, Oxidoreductase
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (oxidative hair dye prepns. contg. pyrazolo-azole
        derivs.)
RN
     9055-15-6 HCAPLUS
CN
     Oxidoreductase (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     ANSWER 31 OF 53 HCAPLUS COPYRIGHT 2002 ACS
L70
ΑN
     1999:282060 HCAPLUS
DN
     130:316430
ΤI
     Oxidative hair dye compositions containing
     oxidoreductase-type enzymes
     Lang, Gerard; Cotteret, Jean
IN
     L'Oreal, Fr.
PA
     PCT Int. Appl., 22 pp.
SO
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CODEN: PIXXD2
DT
         Patent
LA
         French
         ICM A61K007-13
IC
         62-3 (Essential Oils and Cosmetics)
CC
FAN.CNT 1
                                         KIND DATE
         PATENT NO.
                                                                                 APPLICATION NO.
          _____
                                                    -----
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                                                    19990429 WO 1998-FR2231 19981016
         WO 9920236
                                       A1
PΙ
                W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
                        DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, CH, CM, KE, IS, MW, SD, SZ, UG, ZW, AT, BE, CH, CX, DE, DK, ES, CH, CM, RE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CX, DE, DK, ES, CH, CM, RE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CX, DE, DK, ES, CH, CX, DE, DK, CX, DK, CX, DE, DK, CX, DK, CX
                RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
         FR 2769835
                                          A1 19990423
                                                                                FR 1997-13243
                                                                                                                 19971022
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                                          В1
                                                     19991126
         AU 9895463
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         EP 981322
                                          Α1
                                                     20000301
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                     AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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         JP 2000516266
                                           T2
                                                     20001205
                                                                                JP 1999-523369
                                                                                                                 19981016
PRAI FR 1997-13243
                                           Α
                                                     19971022
         WO 1998-FR2231
                                                     19981016
         MARPAT 130:316430
         A ready-to-use oxidn. dyeing compn. for
         keratin fibers, and in particular for human keratin
         fibers such as hair comprise, in an appropriate dyeing
         medium, at least an auto-oxidable dye, and at least an
         oxidoreductase-type enzyme with two electrons in the presence of
         at least a donor for said enzyme, and the dyeing method using
         said compn. A hair dye compn.
         contained 5,6-dihydroxyindole hydrobromide 1.2, uricase (20 IU/mg) 1.5,
         uric acid 1.5, and water and excipients q.s. 100%. The
         compn. is applied on the hair for 30 min followed by
         washing and drying to obtain a blond color.
ST
         oxidative hair dye oxidoreductase enzyme;
         uric acid hydroxyindole oxidative hair dye;
         uricase hydroxyindole oxidative hair dye
ΙT
         Organic solvents
               (1soxidative hair dye compns. contg.
              oxidoreductase-type enzymes)
TΤ
         Oxidative hair dyes
               (oxidative hair dye compns. contg.
              oxidoreductase-type enzymes)
IT
         Enzymes, biological studies
         RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
         (Uses)
               (oxidative hair dye compns. contg.
               oxidoreductase-type enzymes)
ΙT
         69-93-2, Uric acid, biological studies 533-73-3,
         1,2,4-Trihydroxybenzene 1124-09-0, 1-Methyl-2,4,5-trihydroxybenzene
         2380-82-7, 5-Methoxy-6-hydroxyindole 3131-52-0, 5,6-Dihydroxyindole
         4790-08-3, 5,6-Dihydroxyindole 2-carboxylic acid 4813-45-0,
         3-Methyl-5,6-dihydroxyindole 4821-00-5, 1-Methyl-5,6-dihydroxyindole
         4821-01-6, 2-Methyl-5,6-dihydroxyindole 5107-75-5, 2,3-Dimethyl-5,6-
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KOSS 09/852624 Page 57

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dihydroxyindole 9001-37-0, Glucose oxidase
     9001-96-1, Pyruvate oxidase 9002-12-4, Uricase
     9003-99-0, Peroxidase
                             9028-72-2, Lactate oxidase
                                 15069-79-1,
     9055-15-6, Oxidoreductase
     5,6-Diacetoxyindole
                          15872-73-8
                                        29539-03-5, 5,6-Dihydroxyindoline
     37250-80-9, Pyranose oxidase 38213-78-4, 2,6-Diamino-4-
                                                          72584-61-3
     diethylaminophenol
                         69669-73-4, Glycerol oxidase
     89532-67-2
                  113370-02-8, 5-Acetoxy-6-hydroxyindole
                                                            139721-20-3
     139721-21-4
                   223569-35-5
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     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye compns. contg.
        oxidoreductase-type enzymes)
RE.CNT
              THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Novo Nordisk A/S; WO 9737633 A 1997 HCAPLUS
(2) Wella AG; EP 0795313 A 1997 HCAPLUS
(3) Yamahatsu Sangyo Kaisha Ltd; EP 0716846 A 1996 HCAPLUS
IT
     9001-37-0, Glucose oxidase 9002-12-4, Uricase
     9055-15-6, Oxidoreductase
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye compns. contg.
        oxidoreductase-type enzymes)
RN
     9001-37-0 HCAPLUS
CN
    Oxidase, glucose (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN
     9002-12-4 HCAPLUS
CN
    Oxidase, urate (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     9055-15-6 HCAPLUS
RN
    Oxidoreductase (9CI)
CN
                          (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
    ANSWER 32 OF 53 HCAPLUS COPYRIGHT 2002 ACS
L70
     1999:282059 HCAPLUS
ΑN
DN
     130:316429
TΙ
    Oxidative hair dye comprising a direct cationic dye and a direct nitrated
    benzene dye
IN
    Rondeau, Christine
    L'Oreal, Fr. PCT Int. Appl., 74 pp.
PA
SO
     CODEN: PIXXD2
DT
     Patent
LA
     French
IC
     ICM A61K007-13
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                            APPLICATION NO.
                            19990429
                                           WO 1998-FR2145
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             DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE,
             KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW,
             MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,
             TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
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                              19971022
                        A
                              19981007
      WO 1998-FR2145
 OS
      MARPAT 130:316429
      A ready-to-use compn. for dyeing keratin fibers, and in
      particular human keratin fibers such as hair comprising, in an appropriate
      dyeing medium, at least a direct cationic dye properly selected, and at
      least a direct nitrated benzene dye, and the dyeing method using said
      compn. are disclosed. A hair dye compn. contained
      2-amino-5-hydroxy nitrobenzene 0.35, a direct cationic orange dye 0.065,
      water and excipients q.s. 100%. The compn. is applied on the
      hair for 30 min, then washed and dried to obtain a copper color.
 ST
      oxidative hair dye direct cationic dye; benzene dye oxidative hair dye
 IT
      Bromates
      RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
          (alkali metal salts; oxidative hair dye comprising direct cationic dye
         and direct nitrated benzene dye)
 ΙT
      Direct dyes
          (cationic; oxidative hair dye comprising direct cationic dye and direct
         nitrated benzene dye)
 ΙT
      Cationic dyes
          (direct; oxidative hair dye comprising direct cationic dye and direct
         nitrated benzene dye)
 IT
      Salts, biological studies
      RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
          (of peroxy acids; oxidative hair dye comprising direct cationic dye and
         direct nitrated benzene dye)
 ΙT
      Coupling agents
      Organic solvents
      Oxidative hair dyes
      Oxidizing agents
          (oxidative hair dye comprising direct cationic dye and direct nitrated
         benzene dye)
IT
      Enzymes, biological studies
      Peroxysulfates
      RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
      (Uses)
          (oxidative hair dye comprising direct cationic dye and direct nitrated
         benzene dye)
 IT
      Group IIIA element compounds
      RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
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      108-45-2D, 1,3-Benzenediamine, derivs. 110-86-1D, Pyridine, derivs.
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     (Uses)
        (oxidative hair dye comprising direct cationic
        dye and direct nitrated benzene dye)
RE.CNT
              THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
(1) Lang, G; US 3985499 A 1976 HCAPLUS
(2) Lang, G; US 4025301 A 1977 HCAPLUS
     9001-37-0, Glucose oxidase 9002-12-4, Uricase
     9055-15-6, Oxidoreductase
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye comprising direct cationic
        dve and direct nitrated benzene dve)
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     Oxidase, glucose (9CI)
                              (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     9002-12-4 HCAPLUS
     Oxidase, urate (9CI)
                           (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
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RE

RN

CN

RN

CN

Page 60 KOSS 09/852624 9055-15-6 HCAPLUS RN Oxidoreductase (9CI) (CA INDEX NAME) CN *** STRUCTURE DIAGRAM IS NOT AVAILABLE *** ANSWER 33 OF 53 HCAPLUS COPYRIGHT 2002 ACS T.70 AN 1999:282058 HCAPLUS DN 130:316428 ΤI Oxidative hair dye comprising a cationic direct dye and an auto-oxidizable Lang, Gerard; Audousset, Marie-Pascale IN PΑ L'Oreal, Fr. PCT Int. Appl., 70 pp. SO CODEN: PIXXD2 DT Patent LA French ICM A61K007-13 IC CC 62-3 (Essential Oils and Cosmetics) FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE PΙ WO 9920234 A1 19990429 WO 1998-FR2144 19981007 W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG RW: GH, GM, AU 9894473 19990510 AU 1998-94473 19981007 Α1 AU 730008 В2 20010222 EP 971682 A1 20000119 EP 1998-947622 19981007 R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE BR 9806825 Α 20000425 BR 1998-6825 19981007 JP 2000516265 Т2 20001205 JP 1999-523336 19981007 PRAI FR 1997-13242 Α 19971022 WO 1998-FR2144 W 19981007 os MARPAT 130:316428 AΒ A ready-to-use compn. for dyeing keratin fibers, and in particular human keratin fibers such as hair comprising, in an appropriate dyeing medium, at least a cationic direct dye, and at least an auto-oxidizable dye, and the dyeing method using said compn. is disclosed. A hair dye compn. contained 5,6-dihydroxyindoline hydrobromide 0.7, cationic direct Basic Red 76 0.1, water and excipients q.s. 100%. The compn. is applied on the hair for 30 min, then washed and dried to obtain a red blond color. oxidative hair dye cationic direct dye; hydroxyindoline oxidative hair dye ST Basic Red ΙT Bromates RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (alkali metal; oxidative hair dye comprising cationic direct dye and auto-oxidizable dye) IT Direct dyes (cationic; oxidative hair dye comprising cationic direct dye and auto-oxidizable dye) ΙT Cationic dyes (direct; oxidative hair dye comprising cationic direct dye and auto-oxidizable dye)

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IT
     Salts, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (of peroxy acids; oxidative hair dye comprising cationic direct dye and
        auto-oxidizable dye)
IT
     Coupling agents
     Organic solvents
     Oxidative hair dyes
     Oxidizing agents
        (oxidative hair dye comprising cationic direct dye and auto-oxidizable
     Enzymes, biological studies
IT
     Peroxysulfates
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye comprising cationic direct dye and auto-oxidizable
        dye)
IT
     Group IIIA element compounds
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (perborates; oxidative hair dye comprising cationic direct dye and
        auto-oxidizable dye)
IT
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     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye comprising cationic direct
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dye and auto-oxidizable dye)
               THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
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RE
(1) Lang, G; US 3985499 A 1976 HCAPLUS
(2) Lang, G; US 4025301 A 1977 HCAPLUS
     9002-12-4, Uricase 9055-15-6, Oxidoreductase
TΤ
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
         (oxidative hair dye comprising cationic direct
         dye and auto-oxidizable dye)
     9002-12-4 HCAPLUS
RN
     Oxidase, urate (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN
     9055-15-6 HCAPLUS
CN
     Oxidoreductase (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L70 ANSWER 34 OF 53 HCAPLUS COPYRIGHT 2002 ACS
AN
     1999:244549 HCAPLUS
DN
     130:286801
TI
     Oxidative hair dye compositions containing
     oxidoreductase-type enzymes, oxidation bases, and coupling
TN
     De La Mettrie, Roland; Cotteret, Jean; De Labbey, Arnaud; Maubru, Mireille
PA
     L'Oreal, Fr.
SO
     PCT Int. Appl., 40 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     French
IC
     ICM A61K007-13
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                        KIND DATE
                                               APPLICATION NO.
                                                                  DATE
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PRAI FR 1997-12350
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     MARPAT 130:286801
OS
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A ready-to-use oxidn. dyeing compn. for
AB
     keratin fibers, and in particular for human keratin
     fibers such as hair comprise, in a medium appropriate for
     dyeing, at least an oxidn. base, at least a substituted
     meta-phenylenediamine as first coupling agent, and at least a
     second coupling agent selected among meta-aminophenols and
     meta-diphenols, and at least an oxidoreductase-type enzyme with
     2 electrons in the presence of at least a donor for said enzyme. A
     hair dye compn. contained para-
     phenylenediamine 0.216, (2,4-diamino-1-.beta.-hydroxyethyloxy)benzene.2HCl
     0.048, 1,3-dihydroxybenzene 0.198, uricase (20 IU/mg) 1.5, uric
     acid 1.5, excipients and water q.s. 100 g.
ST
     oxidative hair dye oxidoreductase enzyme
     base; coupling agent oxidative hair dye
     oxidoreductase
IT
    Coupling agents
     Organic solvents
     Oxidative hair dyes
     Oxidizing agents
        (oxidative hair dye compns. contg.
        oxidoreductase-type enzymes, oxidn. bases, and coupling
        agents)
IT
     Enzymes, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (oxidative hair dye compns. contg.
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                              95-70-5
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     95-55-6, 2-Aminophenol
     99-98-9, N,N-Dimethyl p-phenylenediamine
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                         106-50-3, 1,4-Benzenediamine, biological studies
     p-phenylenediamine
     108-45-2, 1,3-Benzenediamine, biological studies
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     1,3-Benzenediol, biological studies 110-86-1D, Pyridine, derivs.
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               148-71-0, 4-Amino-N, N-Diethyl 3-methyl aniline
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                THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RF.
(1) Tsujino, Y; US 4961925 A 1990 HCAPLUS
(2) Wella Ag; EP 0795313 A 1997 HCAPLUS
(3) Yamahatsu Sangyo K Ltd; EP 0716846 A 1996 HCAPLUS
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PΑ
     LOreal, Fr.
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SO
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OS
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AB
    A ready-to-use oxidn. dyeing compn. for
    keratin fibers, and in particular human keratin fibers
     such as hair comprise, in a medium appropriate for
    dyeing, para-phenylenediamine as first oxidn. base, at least a
    para-aminophenol as second oxidn. base, 2-Me 5-N-(.beta.-
    hydroxyethyl)amino phenol (I) as coupling agent, and at least an
     oxidoreductase-type enzyme with 2 electrons in the presence of at
     least a donor for said enzyme. A hair dye
     compn. contained uricase (20 IU/mg) 1.5, uric acid 1.5,
     p-phenylenediamine 0.216, para-aminophenol 0.1, I 0.18, ethanol 20.0,
     hydroxyethyl cellulose 1.0, Oramix CG110 8.0, monoethanolamine q.s. pH =
     9.5, excipients and water q.s. 100 g.
    oxidative hair dye oxidoreductase enzyme
ST
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    oxidoreductase enzyme
    Coupling agents
ΙT
    Organic solvents
    Oxidative hair dyes
    Oxidizing agents
        (oxidative hair dye compns. contg.
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        agents)
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KOSS 09/852624 Page 66

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RF.
(1) Tsujino, Y; US 4961925 A 1990 HCAPLUS
(2) Wella Ag; EP 0795313 A 1997 HCAPLUS
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ΤI
     Oxidative hair dye compositions containing
     oxidoreductase-type enzymes and oxidation bases
     Maubru, Mireille
ΙN
PΑ
     L'Oreal, Fr.
SO
     PCT Int. Appl., 36 pp.
     CODEN: PIXXD2
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     ICM A61K007-13
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     A ready-to-use oxidn. dyeing compn. for
     keratin fibers, and in particular for human keratin
     fibers such as hair comprise, in a medium appropriate for
     dyeing, at least an oxidn. base, 2-amino-3-hydroxy pyridine (I) as
     coupling agent, and at least an oxidoreductase-type
     enzyme with 2 electrons in the presence of at least a donor for said
     enzyme. A hair dye compn. contained uricase
     (20 IU/mg) 1.5, uric acid 1.5, p-phenylenediamine 0.30, I 0.30,
     excipients and water q.s. 100 g.
ST
     oxidative hair dye oxidoreductase enzyme
     aminopyridine
TΤ
    Anionic surfactants
       Coupling agents
     Organic solvents
     Oxidative hair dyes
     Oxidizing agents
        (oxidative hair dye compns. contg.
        oxidoreductase-type enzymes and oxidn. bases)
ΙT
     Enzymes, biological studies
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     2-Hydroxy-methylphenol
     95-70-5
               99-98-9, N, N-Dimethyl p-phenylenediamine 101-54-2, N-(Phenyl)
     p-phenylenediamine 106-50-3, 1,4-Benzenediamine, biological studies 110-86-1D, Pyridine, derivs. 123-30-8 148-71-0, 4-Amino-N.N-Diethy
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     Lactate oxidase 9055-15-6, Oxidoreductase
     14791-78-7, 2-Fluoro-p-phenylenediamine 16867 pyridine 17672-22-9, 2-Amino-6-Methyl-phenol
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(1) Kaisha, Y; EP 0716846 A 1996 HCAPLUS
(2) Kyowa Hakko Kogyo Kk; EP 0310675 A 1989 HCAPLUS
(3) L'Oreal; EP 0766958 A 1997 HCAPLUS
(4) Procter & Gamble; WO 9724105 A 1997 HCAPLUS
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5862-80-6

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        oxidoreductase-type enzymes, oxidn. bases, and direct cationic
        dyes)
RE.CNT
              THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Kaisha, Y; EP 0716846 A 1996 HCAPLUS
(2) Kyowa Hakko Kogyo Kk; EP 0310675 A 1989 HCAPLUS
(3) Oreal; WO 9400100 A 1994 HCAPLUS
     9001-37-0, Glucose oxidase 9002-12-4, Uricase
     9055-15-6, Oxidoreductase
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
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        dyes)
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*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
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    Oxidase, urate (9CI)
CN
                            (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN
     9055-15-6 HCAPLUS
CN
                            (CA INDEX NAME)
    Oxidoreductase (9CI)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
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ANSWER 38 OF 53 HCAPLUS COPYRIGHT 2002 ACS
L70
AN
     1999:244545 HCAPLUS
DN
     130:286798
ΤI
     Oxidative hair dye compositions containing
     oxidoreductase-type enzymes and oxidation bases
IN
     De La Mettrie, Roland; Cotteret, Jean; De Labbey, Arnaud; Maubru, Mireille
PA
     L'Oreal, Fr.
                                                        opplicants
SO
     PCT Int. Appl., 37 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     French
     ICM A61K007-13
IC
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
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                                              APPLICATION NO.
                                                               DATE
     WO 9917729
                        A1
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              MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
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                        Α
     WO 1998-FR2074
                        W
                              19980928
OS
     MARPAT 130:286798
AΒ
     A ready-to-use oxidn. dyeing compn. for
     keratin fibers, and in particular human keratin fibers
     such as hair comprise, in a medium appropriate for
     dyeing, at least an oxidn. base selected among
     para-phenylenediamine derivs., double bases, ortho-aminophenols and
     heterocyclic bases, at least a second oxidn. base selected among
     para-aminophenols, at least a meta-aminophenol as coupling
     agent, and at least an oxidoreductase-type enzyme with 2
     electrons in the presence of at least a donor for said enzyme. A
     hair dye compn. contained uricase (20 IU/mg)
     1.5, uric acid 1.5, 2-.beta.-hydroxyethyl-p-
     phenylenediamine.2HCl 0.45, p-aminophenol 0.1, excipients and water q.s.
     100 g.
ST
     oxidative hair dye oxidoreductase enzyme
IT
     Amphoteric surfactants
       Anionic surfactants
     Antioxidants
     Cationic surfactants
       Coupling agents
     Nonionic surfactants
```

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Organic solvents
    Oxidative hair dyes
    Oxidizing agents
     Perfumes
     Permanent wave preparations
     Permeation enhancers
    Preservatives
    Sequestering agents
    Thickening agents
     Zwitterionic surfactants
        (oxidative hair dye compns. contg.
       oxidoreductase-type enzymes and oxidn. bases)
IT
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    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
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                              92-65-9
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    95-70-5
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                                                 399-96-2,
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                                          2359-52-6
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                              2835-96-3, 4-Amino-2-methylphenol
                                                                  2835-99-6,
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     4-Amino-3-methylphenol
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                                      7575-35-1, N, N-Bis-(.beta.-hydroxyethyl)
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    p-phenylenediamine 9001-37-0, Glucose oxidase
    9001-96-1, Pyruvate oxidase 9002-12-4, Uricase
                            9028-72-2, Lactate oxidase
    9003-99-0, Peroxidase
    9055-15-6, Oxidoreductase
                               14791-78-7,
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                       73793-80-3, 2-Hydroxymethyl p-phenylenediamine
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        (oxidative hair dye compns. contg.
       oxidoreductase-type enzymes and oxidn. bases)
RE.CNT
              THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Tsujino, Y; US 4961925 A 1990 HCAPLUS
(2) Wella Ag; EP 0795313 A 1997 HCAPLUS
(3) Yamahatsu Sangyo K Ltd; EP 0716846 A 1996 HCAPLUS
ΙT
     9001-37-0, Glucose oxidase 9002-12-4, Uricase
     9055-15-6, Oxidoreductase
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
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(oxidative hair dye compns. contg.
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     Oxidase, glucose (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN
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     Oxidase, urate (9CI)
                             (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     9055-15-6 HCAPLUS
RN
CN
     Oxidoreductase (9CI)
                             (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     ANSWER 39 OF 53 HCAPLUS COPYRIGHT 2002 ACS
L70
AN
     1999:244544 HCAPLUS
DN
     130:286797
ΤI
     Oxidative hair dye compositions containing
     oxidoreductase-type enzymes and glycols
IN
     Maubru, Mireille
     L'Oreal, Fr. PCT Int. Appl., 36 pp.
PA
SO
     CODEN: PIXXD2
DT
     Patent
LA
     French
IC
     ICM A61K007-13
     62-3 (Essential Oils and Cosmetics)
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FAN.CNT 1
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                             DATE
                                             APPLICATION NO.
                                                                DATE
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OS
     MARPAT 130:286797
AB
     A ready-to-use oxidn. dyeing compn. for
     keratin fibers, and in particular human keratin fibers
     such as hair comprise, in an appropriate medium for
     dyeing, at least an oxidn. base, at least a C2 glycol C4-8 ether
     and/or a C3-9 glycol C1-8 ether and at least an oxidoreductase
     -type enzyme with 2 electrons in the presence of at least a donor for said
```

enzyme. A hair dye compn. contained uricase (20 IU/mg) 1.5, uric acid 1.5, p-phenylenediamine 0.324, 1,3-dihydroxybenzene 0.33, propylene glycol monomethyl ether 20.0, hydroxyethyl cellulose 1.0, Oramix CG110 8.0, monoethanolamine q.s. pH = 9.5, and water q.s. 100 g. ST oxidative hair dye oxidoreductase enzyme glycol IT Amphoteric surfactants Anionic surfactants Antioxidants Cationic surfactants Coupling agents Nonionic surfactants Opacifiers Organic solvents Oxidative hair dyes Oxidizing agents Perfumes Permanent wave preparations Permeation enhancers Preservatives Sequestering agents Thickening agents Zwitterionic surfactants (oxidative hair dye compns. contg. oxidoreductase-type enzymes and glycols) TΤ Enzymes, biological studies Glycol ethers Glycols, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (oxidative hair dye compns. contg. oxidoreductase-type enzymes and glycols) IT 69-93-2, Uric acid, biological studies 89-25-8 90-01-7, 2-Hydroxy-methylphenol 90-15-3, .alpha.-Naphthol 92-65-9 93-05-0. N, N-Diethyl p-phenylenediamine 95-55-6, 2-Aminophenol 95-55-6D, 95-70-5 95-88-5, 4-Chloro-1,3-dihydroxybenzene o-Aminophenol, derivs. 99-98-9, N, N-Dimethyl p-phenylenediamine 101-54-2, N-(Phenyl) 104-68-7, Diethyleneglycol monophenylether p-phenylenediamine 106-50-3, 1,4-Benzenediamine, biological studies 108-26-9 108-45-2, 1,3-Benzenediamine, biological studies 108-46-3, 1,3-Benzenediol, biological studies 110-86-1D, Pyridine, derivs. 111-77-3, Diethyleneglycolmonomethylether 111-90-0, Diethyleneglycolmonoethylether 148-71-0, 4-Amino-N, N-Diethyl 3-methyl aniline 123-30-8 288-13-1D, 289-95-2D, Pyrimidine, derivs. Pyrazole, derivs. 399-95-1, 4-Amino-3-fluorophenol 399-96-2, 4-Amino-2-fluorophenol 533-31-3, 537-65-5 591-27-5, 3-Aminophenol 608-25-3 615-66-7. 2-Chloro p-phenylenediamine 1320-67-8, Propyleneglycol monomethylether 1630-11-1, 2,6-Diethyl p-phenylenediamine 2050-25-1, Diethyleneglycol 2359-52-6 2359-53-7 2380-94-1, 4-Hydroxyindole monobenzylether 2835-95-2, 2-Methyl-5-Aminophenol 2835-96 2835-98-5, 2-Amino-5-methylphenol 2835-99 4664-16-8, 2,6-Dihydroxy 4-methyl pyridine 5306-96-7, 2,3-Dimethyl p-phenylenediamine 2835-96-3, 4-Amino-2-methylphenol 2835-99-6, 4-Amino-3-methylphenol 4770-37-0, 6-Hydroxyindoline 5862-80-6 6393-01-7, 7218-02-2, 2,6-Dimethyl 2,5-Dimethyl p-phenylenediamine p-phenylenediamine 7556-37-8 7575-35-1, N, N-Bis-(.beta.-hydroxyethyl) p-phenylenediamine 9001-37-0, Glucose oxidase 9001-96-1, Pyruvate oxidase 9002-12-4, Uricase 9003-99-0, Peroxidase 9004-62-0, Hydroxyethyl cellulose 9028-72-2, Lactate oxidase 9055-15-6, Oxidoreductase

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     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
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        (oxidative hair dye compns. contg.
        oxidoreductase-type enzymes and glycols)
RE.CNT
              THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Kyowa Hakko K K K; EP 0310675 A 1989 HCAPLUS
(2) Tsujino, Y; US 4961925 A 1990 HCAPLUS
(3) Wella Ag; EP 0795313 A 1997 HCAPLUS
(4) Yamahatsu Sangyo K Ltd; EP 0716846 A 1996 HCAPLUS
IT
     9001-37-0, Glucose oxidase 9002-12-4, Uricase
     9055-15-6, Oxidoreductase
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye compns. contg.
        oxidoreductase-type enzymes and glycols)
     9001-37-0 HCAPLUS
RN
     Oxidase, glucose (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN
     9002-12-4 HCAPLUS
     Oxidase, urate (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN
     9055-15-6 HCAPLUS
CN
    Oxidoreductase (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
    ANSWER 40 OF 53 HCAPLUS COPYRIGHT 2002 ACS
AN
     1999:244543 HCAPLUS
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TΤ
     Oxidative hair dye compositions containing
     oxidoreductase-type enzymes and polymers
     De La Mettrie, Roland; Cotteret, Jean; De Labrey, Arnaud; Maubru, Mireille
IN
     L'Oreal, Fr.
PΑ
     PCT Int. Appl., 33 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     French
IC
     ICM A61K007-13
     62-3 (Essential Oils and Cosmetics)
CC
FAN.CNT 1
     PATENT NO.
                                           APPLICATION NO. DATE
                      KIND DATE
PT
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                      A 1
                            19990415
                                           WO 1998-FR2026
                                                            19980922
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Opacifiers

Organic solvents

Oxidizing agents

Perfumes

Permanent wave preparations

Permeation enhancers

Preservatives

Sequestering agents

Thickening agents

Zwitterionic surfactants

(oxidative hair dye compns. contg.

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oxidoreductase-type enzymes and polymers)
     Enzymes, biological studies
IT
     Paraffin oils
     Polymers, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye compns. contg.
        oxidoreductase-type enzymes and polymers)
     Quaternary ammonium compounds, biological studies
ΙT
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     biological studies 108-46-3, 1,3-Benzenediol, biological studies 591-27-5 9002-12-4, Uricase 9004-34-6D, Cellulose, alkyl ether
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                                             30581-59-0, Dimethylaminoethyl
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           68393-49-7 95144-24-4
                                      131954-48-8
                                                    197179-33-2, Oramix cg110
     223104-80-1
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye compns. contg.
        oxidoreductase-type enzymes and polymers)
RE.CNT
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RE
(1) Beiersdorf Ag; DE 19547991 A 1997 HCAPLUS
(2) Goldwell Ag; EP 0548620 A 1993 HCAPLUS
(3) Goldwell Ag; EP 0548621 A 1993 HCAPLUS
(4) Kaisha, Y; EP 0716846 A 1996 HCAPLUS
(5) Kyowa Hakko Kogyo Kk; EP 0310675 A 1989 HCAPLUS
(6) Oreal; FR 2586913 A 1987
(7) Oreal, S; WO 9400100 A 1994 HCAPLUS
(8) Wella Ag; EP 0795313 A 1997 HCAPLUS
IT
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     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
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     Oxidase, urate (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN
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    Oxidoreductase (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
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L70
    1999:244542 HCAPLUS
ΑN
DN
     130:271867
TΤ
    Oxidative hair dye compositions containing
     oxidoreductase-type enzymes and basic amino acids
IN
     De La Mettrie, Roland; Cotteret, Jean; De Labbey, Arnaud; Maubru, Mireille
PA
    L'Oreal, Fr.
     PCT Int. Appl., 31 pp.
SO
     CODEN: PIXXD2
DT
     Patent
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KOSS 09/852624 Page 78 LA French IC ICM A61K007-13 ICS A61K007-09; A61K007-135 62-3 (Essential Oils and Cosmetics) CC FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE _____ ____ _____ -----19990415 PΙ WO 9917726 A1 WO 1998-FR2025 19980922 AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG FR 1997-12359 FR 2769219 19990409 19971003 A1 FR 2769219 B1 20000310 AU 9892694 A1 19990427 AU 1998-92694 19980922 В2 20000413 AU 718420 EP 969797 Α1 20000112 EP 1998-945349 19980922 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI BR 9806248 20000125 BR 1998-6248 19980922 Α JP 2000507982 Т2 20000627 JP 1999-521106 19980922 ZA 9809006 Α 19990412 ZA 1998-9006 19981002 US 6270534 В1 20010807 US 1999-319167 19990602 US 2001044977 Α1 20011129 US 2001-832882 20010412 PRAI FR 1997-12359 Α 19971003 WO 1998-FR2025 W 19980922 US 1999-319167 A3 19990602 MARPAT 130:271867 OS Cosmetic compn. for treating keratin fibers comprise AB in an appropriate support for keratin fibers: (a) at least an oxidoreductase-type enzyme with 2 electrons in the presence of at least a donor for said enzyme; and (b) at least a basic amino acid. Methods for treating keratin fibers, in particular the methods for dyeing, permanently setting or bleaching hair using said compn. are also disclosed. A hair dye compn. contained uricase (20 IU/mg) 1.5, uric acid 1.5, Oramix CG110 8.0, p-phenylenediamine 0.324, resorcin 0.33, hydroxyethyl cellulose 1.0, ethanol 20.0, arginine q.s. pH = 9.5, and water q.s. 100 g. ST oxidative hair dye amino acid; oxidoreductase enzyme oxidative hair dye ΙT Amphoteric surfactants Anionic surfactants Antioxidants Cationic surfactants Coupling agents Nonionic surfactants Opacifiers Organic solvents Oxidizing agents Perfumes Permanent wave preparations

Permeation enhancers .

Sequestering agents Thickening agents

Preservatives

```
KOSS
       09/852624
                     Page 79
     Zwitterionic surfactants
        (oxidative hair dye compns. contg.
        oxidoreductase-type enzymes and basic amino acids)
IT
    Basic amino acids
    Enzymes, biological studies
     Polymers, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye compns. contg.
        oxidoreductase-type enzymes and basic amino acids)
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    1,3-Benzenediamine, biological studies 108-46-3, 1,3-Benzenediol,
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                                                 591-27-5 9002-12-4,
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    Oxidoreductase
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
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        (oxidative hair dye compns. contg.
        oxidoreductase-type enzymes and basic amino acids)
     197179-33-2, Oramix cg110
TΥ
     RL: NUU (Other use, unclassified); USES (Uses)
        (oxidative hair dye compns. contg.
        oxidoreductase-type enzymes and basic amino acids)
RE.CNT 8
              THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Beiersdorf Ag; DE 19547991 A 1997 HCAPLUS
(2) Goldwell Ag; EP 0548620 A 1993 HCAPLUS
(3) Goldwell Ag; EP 0548621 A 1993 HCAPLUS
(4) Kaisha, Y; EP 0716846 A 1996 HCAPLUS
(5) Kyowa Hakko Kogyo Kk; EP 0310675 A 1989 HCAPLUS
(6) Oreal; FR 2586913 A 1987
(7) Oreal, S; WO 9400100 A 1994 HCAPLUS
(8) Wella Ag; EP 0795313 A 1997 HCAPLUS
     9002-12-4, Uricase 9055-15-6, Oxidoreductase
IT
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye compns. contg.
        oxidoreductase-type enzymes and basic amino acids)
RN
     9002-12-4 HCAPLUS
    Oxidase, urate (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
    9055-15-6 HCAPLUS
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CN
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                           (CA INDEX NAME)
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ΤI
    Oxidative hair dye compositions containing
     oxidoreductase-type enzymes and non-ionic amphiphilic polymers
     De La Mettrie, Roland; Cotteret, Jean; De Labbey, Arnaud; Maubru, Mireille
IN
PΑ
    L'Oreal, Fr.
     PCT Int. Appl., 30 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     French
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ICM A61K007-13

IC

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ICS A61K007-06; A61K007-09; A61K007-135
     62-3 (Essential Oils and Cosmetics)
CC
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                                                            19971003
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PRAI FR 1997-12360
                            19971003
                     W
    WO 1998-FR2023
                            19980922
    A cosmetic compn. for treating keratin fibers comprise
AB
    in an appropriate support for keratin fibers: (a) at least an
    oxidoreductase-type enzyme with 2 electrons in the presence of at
     least a donor for said enzyme; and (b) at least an anionic amphiphilic
    polymer comprising at least an allyl structural unit with a fatty chain.
    Methods for treating keratin fibers, in particular the methods
     for dyeing, permanently setting or bleaching hair
    using said compn. are also disclosed. A hair
    dye compn. contained uricase (20 IU/mg) 1.5,
    uric acid 1.5, Oramix CG110 8.0, p-phenylenediamine 0.324,
     resorcin 0.32, Salcare SC90 (an acrylic polymer) 3.0, ethanol 20.0,
    monoethanolamine q.s. pH = 9.5, and water q.s. 100 g.
ST
    oxidative hair dye oxidoreductase enzyme
    polymer
ΙT
     Polymers, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (non-ionic amphiphilic; oxidative hair dye
        compns. contg. oxidoreductase-type enzymes and
        non-ionic amphiphilic polymers)
IT
    Amphoteric surfactants
    Antioxidants
    Cationic surfactants
       Coupling agents
     Nonionic surfactants
     Opacifiers
     Organic solvents
     Oxidizing agents
     Perfumes
     Permanent wave preparations
     Permeation enhancers
     Preservatives
```

Sequestering agents Thickening agents Zwitterionic surfactants (oxidative hair dye compns. contg. oxidoreductase-type enzymes and non-ionic amphiphilic polymers) IT Acrylic polymers, biological studies Enzymes, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (oxidative hair dye compns. contg. oxidoreductase-type enzymes and non-ionic amphiphilic polymers) 106-50-3, ΙT 69-93-2, **Uric** acid, biological studies 1,4-Benzenediamine, biological studies 108-45-2, 1,3-Benzenediamine, biological studies 108-46-3, 1,3-Benzenediol, biological studies 591-27-5 9002-12-4, Uricase 9055-15-6, 109292-17-3, Salcare SC90 Oxidoreductase RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (oxidative hair dye compns. contg. oxidoreductase-type enzymes and non-ionic amphiphilic polymers) RE.CNT THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD RE (1) Beiersdorf Ag; DE 19547991 A 1997 HCAPLUS (2) Goldwell Ag; EP 0548620 A 1993 HCAPLUS (3) Goldwell Ag; EP 0548621 A 1993 HCAPLUS (4) Kyowa Hakko Kogyo Kk; EP 0310675 A 1989 HCAPLUS (5) Oreal; FR 2586913 A 1987 (6) Oreal; EP 0827739 A 1998 HCAPLUS (7) Oreal, S; WO 9400100 A 1994 HCAPLUS (8) Wella Ag; EP 0795313 A 1997 HCAPLUS (9) Yamahatsu Sangyo Kaisha; EP 0716846 A 1996 HCAPLUS 9002-12-4, Uricase 9055-15-6, Oxidoreductase TT RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (oxidative hair dye compns. contg. oxidoreductase-type enzymes and non-ionic amphiphilic polymers) RN · 9002-12-4 HCAPLUS CN Oxidase, urate (9CI) (CA INDEX NAME) *** STRUCTURE DIAGRAM IS NOT AVAILABLE *** RN 9055-15-6 HCAPLUS CN Oxidoreductase (9CI) (CA INDEX NAME) *** STRUCTURE DIAGRAM IS NOT AVAILABLE *** ANSWER 43 OF 53 HCAPLUS COPYRIGHT 2002 ACS ΑN 1999:244540 HCAPLUS DN 130:286796 TI Oxidative hair dye compositions containing oxidoreductase-type enzymes and non-ionic amphiphilic polymers IN De La Mettrie, Roland; Cotteret, Jean; De Labbey, Arnaud; Maubru, Mireille PA L'Oreal, Fr. PCT Int. Appl., 28 pp. SO CODEN: PIXXD2 DT Patent LA French IC ICM A61K007-13 ICS A61K007-06 CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

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KIND DATE
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                                                              DATE
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                        A1 19990409
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 PRAI FR 1997-12361
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                             19971003
      WO 1998-FR2022
                        W
                             19980922
      A cosmetic compn. for treating keratin fibers comprise
· AB
      in an appropriate support for keratin fibers: (a) at least an
      oxidoreductase type enzyme with 2 electrons in the presence of at
      least a donor for said enzyme; and (b) at least a non-ionic amphiphilic
      polymer comprising at least a fatty chain and at least a hydrophilic
      structural unit. Methods for treating keratin fibers, in
      particular methods for dyeing, permanently setting and bleaching
      hair using said compn. are also disclosed.
      hair dye compn. contained uricase (20 IU/mg)
      1.5, uric acid 1.5, Oramix CG110 8.8, p-phenylenediamine 0.324,
      resorcin 0.32, Dapral T212 (urethane polyether) 1.0, ethanol 20.0,
      monoethanolamine q.s. pH = 9.5, and water q.s. 100 g.
 ST
      oxidative hair dye oxidoreductase enzyme
      polymer
 ΙT
      Amphoteric surfactants
        Anionic surfactants
      Antioxidants
      Cationic surfactants
        Coupling agents
      Nonionic surfactants
      Opacifiers
      Organic solvents
      Oxidizing agents
      Perfumes
      Permanent wave preparations
      Permeation enhancers
      Preservatives
      Sequestering agents
      Thickening agents
      Zwitterionic surfactants
         (oxidative hair dye compns. contg.
         oxidoreductase-type enzymes and non-ionic amphiphilic polymers)
 IT
      Enzymes, biological studies
      Polyether-polyurethanes
      Polymers, biological studies
      RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
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KOSS 09/852624 Page 83 (Uses) (oxidative hair dye compns. contg. oxidoreductase-type enzymes and non-ionic amphiphilic polymers) ΙT 69-93-2, Uric acid, biological studies 106-50-3, 1,4-Benzenediamine, biological studies 108-45-2, 1,3-Benzenediamine, biological studies 108-46-3, 1,3-Benzenediol, biological studies 591-27-5 **9002-12-4**, Uricase 9004-34-6D, Cellulose, alkyl ether 9004-62-0, Hydroxyethyl cellulose 9055-15-6, 37353-59-6, Hydroxymethyl cellulose 39421-75-5, Oxidoreductase 77035-98-4 77035-99-5, Hexadecene-vinylpyrrolidone Hydroxypropyl guar 88322-43-4 copolymer 138860-57-8, Dapral T212 222833-13-8 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (oxidative hair dye compns. contg. oxidoreductase-type enzymes and non-ionic amphiphilic polymers) RE.CNT THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD RE (1) Kyowa Hakko K K K; EP 0310675 A 1989 HCAPLUS (2) L'Oreal; FR 2694018 A 1994 HCAPLUS (3) Wella Ag; DE 1048389 B 9002-12-4, Uricase 9055-15-6, Oxidoreductase TΤ RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (oxidative hair dye compns. contg. oxidoreductase-type enzymes and non-ionic amphiphilic polymers) RN 9002-12-4 HCAPLUS Oxidase, urate (9CI) (CA INDEX NAME) CN *** STRUCTURE DIAGRAM IS NOT AVAILABLE *** RN 9055-15-6 HCAPLUS CN Oxidoreductase (9CI) (CA INDEX NAME) *** STRUCTURE DIAGRAM IS NOT AVAILABLE *** L70 ANSWER 44 OF 53 HCAPLUS COPYRIGHT 2002 ACS AN 1999:244539 HCAPLUS 130:301477 DN Oxidative hair dye compositions containing TI oxidoreductase-type enzymes and fatty sucronamides De La Mettrie, Roland; Cotteret, Jean; De Labbey, Arnaud; Maubru, Mireille IN L'Oreal, Fr. PCT Int. Appl., 30 pp. PΑ SO CODEN: PIXXD2 DT Patent LA French IC ICM A61K007-13

FAN.CNT 1 APPLICATION NO. DATE PATENT NO. KIND DATE ____ WO 1998-FR2020 19990415 19980922 PΙ WO 9917723 A1 W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

ICS A61K007-135; A61K007-09

62-3 (Essential Oils and Cosmetics)

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KOSS
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                      Page 84
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OS
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     A cosmetic compn. for treating keratin fibers comprise
AB
     in an appropriate support for the keratin fibers: (a) at least
     an oxidoreductase-type enzyme with 2 electrons in the presence
     of at least a donor for said enzyme; and (b) at least a non-ionic fatty
     sucronamide. Methods for treating keratin fibers, in particular
     for dyeing, permanently setting, or bleaching hair
     using said compn. are also disclosed. A hair
     dye compn. contained uricase (20 IU/mg) 1.5,
     uric acid 1.5, ethanol 20.0, hydroxyethyl cellulose 1.0,
     N-cocolactobionamide 5, p-phenylenediamine 0.324, resorcin 0.33, and water
     q.s. 100 g.
ST
     oxidative hair dye oxidoreductase enzyme
     sucronamide
     Fatty amides
IT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (N-substituted derivs.; oxidative hair dye
        compns. contg. oxidoreductase-type enzymes and fatty
        sucronamides)
IT
     Amphoteric surfactants
       Anionic surfactants
     Antioxidants
     Cationic surfactants
       Coupling agents
     Nonionic surfactants
     Opacifiers
     Organic solvents
     Oxidizing agents
     Perfumes
     Permanent wave preparations
     Permeation enhancers
     Preservatives
     Sequestering agents
     Thickening agents
     Zwitterionic surfactants
        (oxidative hair dye compns. contg.
        oxidoreductase-type enzymes and fatty sucronamides)
IT
     Enzymes, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
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        (oxidative hair dye compns. contg.
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         (oxidative hair dye compns. contg.
        oxidoreductase-type enzymes and fatty sucronamides)
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     9002-12-4, Uricase 9055-15-6, Oxidoreductase
TT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
         (oxidative hair dye compns. contg.
        oxidoreductase-type enzymes and fatty sucronamides)
RN
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     Oxidoreductase (9CI)
                             (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     ANSWER 45 OF 53 HCAPLUS COPYRIGHT 2002 ACS
L70
     1999:244538 HCAPLUS
ΑN
DN
     130:286795
ΤI
     Oxidative hair dye compositions containing
     oxidoreductase-type enzymes and amine silicones
IN
     De La Mettrie, Roland; Cotteret, Jean; De Labbey, Arnaud; Maubru, Mireille
PΑ
     L'Oreal, Fr.
SO
     PCT Int. Appl., 34 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     French
     ICM A61K007-09
IC
     ICS A61K007-135; A61K007-13
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                       KIND DATE
                                              APPLICATION NO.
                                                                DATE
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                              19990415
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              KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
                     PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
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KOSS
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                     Page 86
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PRAI FR 1997-12358
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                            19971003
                       W
                            19980922
     WO 1998-FR2027
                       А3
                            19990602
    US 1999-319206
    A cosmetic compn. for treating keratin fibers comprise
AB
     in an appropriate support for keratin fibers: (a) at least an
     oxidoreductase-type enzyme with 2 electrons in the presence of at
     least a donor for said enzyme; and (b) at least an amine silicone.
    Methods for treating keratin fibers, in particular methods for
     dyeing, permanently setting or bleaching hair using said
     compn. are also disclosed. A hair dye
     compn. contained uricase (20 IU/mg) 1.5, uric acid 1.5,
     p-phenylenediamine 0.324, resorcin 0.33, Dow Corning 939 emulsion
     (polydimethylsiloxane contg. aminoethylaminopropyl group) 1.2, and water
     q.s. 100 q.
ST
     oxidative hair dye oxidoreductase enzyme
     silicone
IT
     Polysiloxanes, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (3-[(2-aminoethyl)amino]-2-methylpropyl Me, di-Me; oxidative
        hair dye compns. contg.
        oxidoreductase-type enzymes and amine silicones)
TT
     Polysiloxanes, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (amino-contg.; oxidative hair dye compns.
        contg. oxidoreductase-type enzymes and amine silicones)
ΙT
    Amphoteric surfactants
       Anionic surfactants
    Antioxidants
    Cationic surfactants
       Coupling agents
    Nonionic surfactants
    Opacifiers
     Perfumes
     Permanent wave preparations
     Permeation enhancers
     Preservatives
     Sequestering agents
    Thickening agents
     Zwitterionic surfactants
        (oxidative hair dye compns. contg.
        oxidoreductase-type enzymes and amine silicones)
IT
    Enzymes, biological studies
     Polysiloxanes, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye compns. contg.
        oxidoreductase-type enzymes and amine silicones)
     69-93-2, Uric acid, biological studies
                                               106-50-3,
     1,4-Benzenediamine, biological studies
                                               108-45-2, 1,3-Benzenediamine,
                studies 108-46-3, 1,3-Benzenediol, biological studies 591-27-5 9002-12-4, Uricase 9055-15-6,
    biological studies
                      203341-07-5, Dow Corning 939
     Oxidoreductase
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
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(oxidative hair dye compns. contg.
        oxidoreductase-type enzymes and amine silicones)
             THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Beiersdorf Ag; DE 19547991 A 1997 HCAPLUS
(2) Goldwell Ag; EP 0548620 A 1993 HCAPLUS
(3) Goldwell Aq; EP 0548621 A 1993 HCAPLUS
(4) Kaisha, Y; EP 0716846 A 1996 HCAPLUS
(5) Kyowa Hakko Kogyo Kk; EP 0310675 A 1989 HCAPLUS
(6) Oreal; FR 2586913 A 1987
(7) Oreal; WO 9400100 A 1994 HCAPLUS
(8) Wella Ag; EP 0795313 A 1997 HCAPLUS
IT
     9002-12-4, Uricase 9055-15-6, Oxidoreductase
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (oxidative hair dye compns. contg.
        oxidoreductase-type enzymes and amine silicones)
RN
     9002-12-4 HCAPLUS.
CN
     Oxidase, urate (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN
     9055-15-6 HCAPLUS
CN
     Oxidoreductase (9CI)
                          (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L70
    ANSWER 46 OF 53 HCAPLUS COPYRIGHT 2002 ACS
AN
     1999:244537 HCAPLUS
DN
     130:286794
    Oxidative hair dye compositions containing
TI
     oxidoreductase-type enzymes and anionic guar gums
     De La Mettrie, Roland; Cotteret, Jean; De Labbey, Arnaud; Maubru, Mireille
IN
PA
    L'Oreal, Fr.
     PCT Int. Appl., 29 pp.
SO
    CODEN: PIXXD2
DT
     Patent
LA
     French
IC
     ICM A61K007-06
     ICS A61K007-13; A61K007-135; A61K007-09
     62-3 (Essential Oils and Cosmetics)
CC
FAN.CNT 1
                     KIND DATE
                                          APPLICATION NO. DATE
     PATENT NO.
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             NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
             UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
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             CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     FR 2769216
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            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
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KOSS
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                     Page 88
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                                           BR 1998-6171
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PRAI FR 1997-12356
                       Α
                            19971003
    WO 1998-FR2024
                       W
                            19980922
    A cosmetic compn. for treating keratin fibers comprise
AB
    in an appropriate support for keratin fibers: (a) at least an
    oxidoreductase-type enzyme with 2 electrons in the presence of at
    least a donor for said enzyme; and (b) at least a non-ionic guar gum.
    Methods for treating keratin fibers, in particular the methods
     for dyeing, permanent setting or bleaching hair using
     said compn. are also disclosed. A hair dye
    compn. contained uricase (20 IU/mg) 1.5, uric acid 1.5,
     ethanol 20.0, Oramix CG110 8.0, p-phenylenediamine 0.324, resorcin 0.32,
    Jaguar HP60 1.6, monoethanolamine q.s. pH = 9.5, and water q.s. 100 \text{ g}.
ST
    oxidative hair dye oxidoreductase enzyme;
    anionic quar qum oxidative hair dye
    Amphoteric surfactants
IT
       Anionic surfactants
    Antioxidants
    Cationic surfactants
       Coupling agents
    Nonionic surfactants
    Opacifiers
    Perfumes
    Permanent wave preparations
    Permeation enhancers
    Preservatives
    Sequestering agents
    Thickening agents
     Zwitterionic surfactants
        (oxidative hair dye compns. contg.
        oxidoreductase-type enzymes and anionic guar gums)
    Enzymes, biological studies
ΙT
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye compns. contg.
        oxidoreductase-type enzymes and anionic guar gums)
                                             106-50-3,
     69-93-2, Uric acid, biological studies
ΙT
     1,4-Benzenediamine, biological studies
                                              108-45-2, 1,3-Benzenediamine,
    biological studies
                          108-46-3, 1,3-Benzenediol, biological studies
                591-27-5
                           9000-30-0D, Guar gum, C1-6 hydroxyalkyl
    123-30-8
    derivs. 9002-12-4, Uricase 9055-15-6,
                    39421-75-5, Jaguar HP60
    Oxidoreductase
                                                39465-11-7,
                             62931-11-7
    Hydroxyethyl guar gum
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (oxidative hair dye compns. contg.
        oxidoreductase-type enzymes and anionic guar gums)
RE.CNT
              THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
(1) Beiersdorf Ag; DE 19547991 A 1997 HCAPLUS
(2) Kaisha, Y; EP 0716846 A 1996 HCAPLUS
(3) Kyowa Hakko Kogyo Kk; EP 0310675 A 1989 HCAPLUS
(4) Oreal; WO 9400100 A 1994 HCAPLUS
(5) Procter & Gamble; FR 2112550 A 1972 HCAPLUS
(6) Thomas, K; US 3893803 A 1975 HCAPLUS
(7) Wella Ag; EP 0795313 A 1997 HCAPLUS
     9002-12-4, Uricase 9055-15-6, Oxidoreductase
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
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(Uses) (oxidative hair dye compns. contg. oxidoreductase-type enzymes and anionic guar gums) RN 9002-12-4 HCAPLUS Oxidase, urate (9CI) CN (CA INDEX NAME) *** STRUCTURE DIAGRAM IS NOT AVAILABLE *** RN 9055-15-6 HCAPLUS CN Oxidoreductase (9CI) (CA INDEX NAME) *** STRUCTURE DIAGRAM IS NOT AVAILABLE *** ANSWER 47 OF 53 HCAPLUS COPYRIGHT 2002 ACS 1.70 ΑN 1999:244536 HCAPLUS DN 130:301476 ΤI Oxidative hair dye compositions containing oxidoreductase-type enzymes and anionic surfactants IN De La Mettrie, Roland; Cotteret, Jean; De Labbey, Arnaud; Maubru, Mireille PA L'Oreal, Fr. SO PCT Int. Appl., 31 pp. CODEN: PIXXD2 DTPatent LA French ICM A61K007-06 IC ICS A61K007-50 CC 62-3 (Essential Oils and Cosmetics) FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE _____ _____ 19990415 WO 1998-FR2021 19980922 PΙ WO 9917720 A1 RW: GH, GM, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, FI, FR, GN, GW, ML, MR, NE, SN, TD, TG CM, GA, 19990409 FR 1997-12363 19971003 FR 2769223 Α1 AU 9892690 A1 19990427 AU 1998-92690 19980922 AU 718674 B2 20000420 BR 9806252 20000125 BR 1998-6252 19980922 Α EP 998255 20000510 EP 1998-945345 Α1 19980922 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI JP 2000507978 · T2 20000627 JP 1999-521102 19980922 ZA 9809007 Α 19990412 ZA 1998-9007 19981002 US 6261325 В1 20010717 US 1999-319201 19990709 PRAI FR 1997-12363 Α 19971003 WO 1998-FR2021 W 19980922 OS MARPAT 130:301476 AΒ A cosmetic compn. for treating keratin fibers comprise in an appropriate support for keratin fibers: (a) at least an oxidoreductase-type enzyme with 2 electrons in the presence of at least a donor for said enzyme; (b) at least an anionic surfactant selected in the group consisting of (i) acylisethionates; (ii) acyltaurates (iii) acylsarcosinates; (iv) acylglutamates; (v) polyoxyalkylene carboxylic ether acids and their salts; (vi) fatty

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glucamide sulfates; (vii) alkylgalactoside uronates; (viii)
     alkylpolyglucoside anionic derivs.; and (ix) their mixts. Methods for
     treating keratin fibers, in particular for dyeing,
     permanently setting or bleaching hair using said compn
     . are also disclosed. A hair dye compn.
     contained uricase (20 IU/mg) 1.5, uric acid 1.5, ethanol 20.0,
     hydroxyethyl cellulose 1.0, Acylglutamate CT12 15.0,
     p-phenylenediamine 0.324, resorcin 0.33, monoethanolamine q.s. pH = 9.5,
     and water q.s. 100 g.
     oxidative hair dye oxidoreductase enzyme
ST
     surfactant
TΤ
     Coco fatty acids
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (2-sulfoethyl esters, sodium salts; oxidative hair
        dye compns. contg. oxidoreductase-type
        enzymes and anionic surfactants)
IT
     Galactosides
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (alkyl derivs.; oxidative hair dye compns
        . contg. oxidoreductase-type enzymes and anionic
        surfactants)
     Fatty acid salts
IT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (coco, 2-sulfoethyl esters, sodium salts; oxidative hair
        dye compns. contg. oxidoreductase-type
        enzymes and anionic surfactants)
IT
     Amphoteric surfactants
       Anionic surfactants
     Antioxidants
     Cationic surfactants
       Coupling agents
     Nonionic surfactants
     Opacifiers
     Oxidizing agents
     Perfumes
     Permanent wave preparations
     Permeation enhancers
     Preservatives
     Sequestering agents
     Thickening agents
     Zwitterionic surfactants
        (oxidative hair dye compns. contg.
        oxidoreductase-type enzymes and anionic
        surfactants)
ΙT
     Enzymes, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye compns. contg.
        oxidoreductase-type enzymes and anionic
        surfactants)
IT
     Carboxylic acids, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (polyoxyalkylene; oxidative hair dye
        compns. contg. oxidoreductase-type enzymes and
        anionic surfactants)
ΙT
     27306-90-7
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RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
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        (Akypo RLM; oxidative hair dye compns.
        contg. oxidoreductase-type enzymes and anionic
        surfactants)
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    biological studies 106-50-3, 1,4-Benzenediamine, biological studies
    107-36-8D, Isethionic acid, acyl derivs. 107-97-1D, Sarcosinic acid,
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    acyl derivs.
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     alkylpolyglucoside derivs. 7664-38-2D, Phosphoric acid,
    alkylpolyglucoside derivs. 9002-12-4, Uricase 9055-15-6
                       38732-22-8D, Triethanolamine glutamate,
     , Oxidoreductase
     cocoyl derivs.
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (oxidative hair dye compns. contg.
       oxidoreductase-type enzymes and anionic
       surfactants)
             THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
RE
(1) Beiersdorf Ag; DE 19547991 A 1997 HCAPLUS
(2) Kyowa Hakko K K K; EP 0310675 A 1989 HCAPLUS
(3) L'Oreal; FR 2694018 A 1994 HCAPLUS
IT
    9002-12-4, Uricase 9055-15-6, Oxidoreductase
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye compns. contg.
       oxidoreductase-type enzymes and anionic
       surfactants)
RN
     9002-12-4 HCAPLUS
    Oxidase, urate (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN
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CN
    Oxidoreductase (9CI)
                          (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L70
    ANSWER 48 OF 53 HCAPLUS COPYRIGHT 2002 ACS
    1999:231492 HCAPLUS
ΑN
DN
    130:257164
    Enzymic foam compositions for dyeing keratinous fibers
ΤI
    Sorensen, Niels Henrik
IN
PΑ
    Novo Nordisk A/S, Den.
SO
     PCT Int. Appl., 25 pp.
     CODEN: PIXXD2
DT
     Patent
LA
    English
IC
     ICM A61K007-13
     ICS A61K007-06
     62-3 (Essential Oils and Cosmetics)
     Section cross-reference(s): 41
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                           APPLICATION NO.
                                                            DATE
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                                                            19980918
PΤ
                     A1
                            19990401
                                           WO 1998-DK406
        W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG,
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Polyporus

Polyporus pinsitus

KOSS 09/852624 Page 93 Pyricularia Pyricularia oryzae Rhizoctonia Rhizoctonia solani Scytalidium Scytalidium thermophilum Trametes hirsuta Trametes versicolor (laccase of; oxidative enzymic foam compns. for dyeing keratinous fibers) IT Phenols, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (naphthols; oxidative enzymic foam compns. for dyeing keratinous fibers) Amphoteric surfactants TΤ Anionic surfactants Foaming agents Nonionic surfactants Oxidative hair dyes Zwitterionic surfactants (oxidative enzymic foam compns. for dyeing keratinous fibers) TΤ Aromatic diamines Diamines Oxidative enzymes Phenols, biological studies Polyphenols (nonpolymeric) Soaps RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (oxidative enzymic foam compns. for dyeing keratinous fibers) ΙT Dyes (oxidative; oxidative enzymic foam compns. for dyeing keratinous fibers) Amines, biological studies TT RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (phenolic; oxidative enzymic foam compns. for dyeing keratinous fibers) 95-55-6, o-Aminophenol 95-70-5, p-Toluenediamine IT 106-50-3p-Phenylenediamine, biological studies 151-21-3, Sodium dodecyl sulfate, biological studies 9002-10-2, Tyrosinase 9003-99-0, Peroxidase 9035-73-8, Oxidase 9055-15-6, Oxidoreductase 9004-82-4 58823-88-4, Betaine phosphate 80498-15-3, Laccase RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (oxidative enzymic foam compns. for dyeing keratinous fibers) RE.CNT THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD RE (1) Goldwell; EP 0548620 A 1993 HCAPLUS (2) Kyowa Hakko; EP 0310675 A 1989 HCAPLUS (3) L'Oreal; FR 2694018 A 1994 HCAPLUS (4) Novo Nordisk; WO 9723685 A 1997 HCAPLUS (5) Perma; EP 0504005 A 1992 HCAPLUS (6) Procter & Gamble; FR 2112549 A 1972 HCAPLUS (7) Wella; EP 0795313 A 1997 HCAPLUS (8) Yamahatsu; EP 0716846 A 1996 HCAPLUS 9002-10-2, Tyrosinase 9055-15-6, Oxidoreductase IT RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

KOSS 09/852624 Page 94 (Uses) (oxidative enzymic foam compns. for dyeing keratinous fibers) RN 9002-10-2 HCAPLUS CN Oxygenase, monophenol mono- (9CI) (CA INDEX NAME) *** STRUCTURE DIAGRAM IS NOT AVAILABLE *** RN 9055-15-6 HCAPLUS CN Oxidoreductase (9CI) (CA INDEX NAME) *** STRUCTURE DIAGRAM IS NOT AVAILABLE *** ANSWER 49 OF 53 HCAPLUS COPYRIGHT 2002 ACS L70 AN 1998:804150 HCAPLUS DN 130:57002 TΙ Keratin fiber oxidation dyeing composition containing an oxidoreductase enzyme Maubru, Mireille IN PΑ L'oreal, Fr. PCT Int. Appl., 46 pp. SO CODEN: PIXXD2 DT Patent LA French ICM A61K007-13 IC CC 62-4 (Essential Oils and Cosmetics) FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE ______ _____ _____ ____ PΙ WO 9855083 A1 19981210 WO 1998-FR913 19980506 W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG FR 2763841 Α1 19981204 FR 1997-6802 19970603 FR 2763841 В1 20000211 AU 9876604 Α1 19981221 AU 1998-76604 19980506 AU 730767 B2 20010315 EP 988021 EP 1998-924391 A1 20000329 19980506 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI JP 2000513748 T2 20001017 JP 1999-501693 19980506 PRAI FR 1997-6802 Α 19970603 WO 1998-FR913 W 19980506 OS MARPAT 130:57002 A ready-for-use keratin fiber oxidn. dyeing AB compn., in particular for human keratin fibers such as hair, comprise, at least a heterocyclic oxidn. dye, at least an oxidoreductase enzyme with 2 electrons in the presence of at least a donor for said enzyme. An oxidative hair dye prepn. contained pyrazolol-[1,5-a]-pyrimidine-3,7-diamine.2HCl 0.666, 2-methyl-5-aminophenol 0.369, Uricase 20 IU/mg 0.8, uric

acid 1.2, excipients and water q.s. 100 g. The compn. was applied on a gray hair for 30 min, then washed with a shampoo and dried to give a golden iris color.

ST oxidn hair dye oxidoreductase enzyme

IT Coupling agents

Oxidative hair dyes Oxidizing agents (keratin fiber oxidn. dyeing compn. contq. oxidoreductase enzyme) IT Enzymes, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (keratin fiber oxidn. dyeing compn. contg. oxidoreductase enzyme) 95-54-5D, 1,2-Benzenediamine, derivs. ΙT 51-17-2D, Benzimidazole, derivs. 106-50-3D, 1,4-Benzenediamine, derivs. 108-45-2D, 95-55-6D, derivs. 1,3-Benzenediamine, derivs. 123-30-8D, derivs. 533-31-3D, Sesamol, 1004-74-6, 2,4,5,6-Tetra-aminopyrimidine 1004-75-7, 4-Hydroxy-2,5,6-triaminopyrimidine 2380-84-9, 7-Hydroxyindole 2380-86-1, 6-Hydroxyindole 2380-94-1, 4-Hydroxyindole 2652-77-9 3131-52-0, 5,6-Dihydroxyindole 4331-29-7, 4-Aminobenzimidazole 4744-71-2D, 3,5-Pyrazolidinedione, derivs. 4701-08-0 4770-37-0, 5192-04-1, 7-Aminoindole 5192-23-4, 4-Aminoindole 6-Hydroxyindoline 5318-27-4, 6-Aminoindole 5735-53-5D, Benzomorpholine, derivs. 6941-70-4 7556-37-8 7711-50-4, 4,7-Dimethoxy-benzimidazole 9002-12-4, Uricase 9055-15-6, Oxidoreductase 16461-98-6, 1H-Pyrazole-3,4-diamine 15918-79-3, 6-Aminoindoline 26011-57-4 26021-57-8 19499-83-3 26438-50-6 29274-23-5, Pyrazolo[1,5-a]pyrimidin-7-one 29539-03-5, 5,6-Dihydroxyindoline 35320-67-3, 4-Hydroxy-2-methylindole 45514-38-3, 4,5-Diamino 1-methylpyrazole 46160-00-3, 5,6-Dimethyl pyrazolo[1,5-a]pyrimidine-3,7-51437-33-3 52943-88-1 67021-83-4, 4-Hydroxybenzimidazole diamine 72721-02-9, 5,6-Dimethoxy-benzimidazole 69151-32-2 81329-90-0 85926-99-4, 4-Hydroxyindoline 93846-05-0 94977-60-3, 4-Hydroxy-2-methylbenzimidazole 96013-05-7, 4-Amino-2-methyl-101948-27-0 benzimidazole 102169-73-3, 1H-Benzimidazole-5,6-diol 102170-38-7, 4,7-Dihydroxy-benzimidazole 126462-95-1 130570-60-4, 6-Hydroxy-1-methylindole 131311-66-5 132026-21-2 145594-51-0 151406-76-7 151521-74-3 157587-56-9 157587-57-0 157587-58-1 184172-85-8 184172-97-2 184172-99-4 184173-00-0 184173-01-1 184173-02-2 184173-03-3 184173-43-1 184173-45-3 186963-53-1 186963-54-2 186963-55-3 186963-56-4 186963-71-3 197304-94-2 201599-12-4, Pyrazolo[1,5-a]-pyrimidine-3,7-197355-52-5 197355-53-6 diamine 201599-14-6, 2-Methyl pyrazolo[1,5-a]-pyrimidine-3,7-diamine 201599-15-7, 2,5-Dimethylpyrazolo[1,5-a]pyrimidine-3,7-diamine 201599-16-8, Pyrazolo[1,5-a]pyrimidine-3,5-diamine 201599-17-9, 2,7-Dimethyl pyrazolo[1,5-a]pyrimidine-3,5-diamine 201599-18-0, 201599-19-1, 3-Amino 5-methyl 3-Aminopyrazolo[1,5-a]pyrimidin-7-ol pyrazolo[1,5-a]pyrimidin-7-ol 201599-20-4, 3-Amino pyrazolo[1,5-a]pyrimidin-5-ol 201599-21-5, 2-(3-Amino pyrazolo[1,5-a]pyrimidin-7ylamino)-ethanol 201599-22-6, 3-Amino-7-.beta.-hydroxyethylamino-5methylpyrazolo[1,5-a]pyrimidine 201599-23-7, 2-(7-Amino pyrazolo[1,5-a]pyrimidin-3-ylamino)-ethanol 201599-24-8, 2-[(3-Amino-pyrazolo[1,5-a]pyrimidin-7-yl)-(2-hydroxyethyl)-amino-ethanol 201599-25-9, 2-[(7-Amino-pyrazolo[1,5-a]pyrimidin-3-yl)-(2-hydroxyethyl)-201599-26-0, 2,6-Dimethyl pyrazolo[1,5-a]pyrimidine-3,7amino]-ethanol 217318-24-6 diamine 201599-27-1 217318-23-5 217318-25-7, 1H-Pyrazolo[1,5-a]benzimidazol-6-amine 217318-26-8 217318-27-9 217318-29-1 217318-30-4 217318-31-5 217318-28-0 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (keratin fiber oxidn. dyeing compn. contq. oxidoreductase enzyme) RE.CNT THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD RE

- (1) Aaslyng, D; WO 9719999 A 1997 HCAPLUS
- (2) Kyowa Hakko Kogyo KK; EP 0310675 A 1989 HCAPLUS
- (3) Masahiro, A; Journal of Organic Chemistry 1996, V61, P5610
- (4) Samain, H; WO 9400100 A 1994 HCAPLUS
- (5) Yamahatsu Sangyo Kaisha; EP 0716846 A 1996 HCAPLUS
- (6) Yoshio, T; J Soc Cosmet Chem 1991, V42, P273
- IT 9002-12-4, Uricase 9055-15-6, Oxidoreductase

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(keratin fiber oxidn. dyeing compn.

contg. oxidoreductase enzyme)

- RN 9002-12-4 HCAPLUS
- CN Oxidase, urate (9CI) (CA INDEX NAME)
- *** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
- RN 9055-15-6 HCAPLUS
- CN Oxidoreductase (9CI) (CA INDEX NAME)
- *** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
- L70 ANSWER 50 OF 53 HCAPLUS COPYRIGHT 2002 ACS
- AN 1997:632602 HCAPLUS
- DN 127:283170
- TI Agent and process for oxidative dyeing of keratin fibers
- IN Kunz, Manuela; Le Cruer, Dominique
- PA Wella Aktiengesellschaft, Germany
- SO Eur. Pat. Appl., 11 pp. CODEN: EPXXDW
- DT Patent
- LA German
- IC ICM A61K007-13
- CC 62-3 (Essential Oils and Cosmetics)
- FAN.CNT 1

FAN.	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 795313 EP 795313	A2 A3	19970917 19971022	EP 1996-119343	19961203
	R: DE, ES,	FR, GB			
	DE 19610392	A1	19970918	DE 1996-19610392	19960316
	JP 09249540	A2	19970922	JP 1996-355385	19961219
	JP 10007538	. A2	19980113	JP 1997-67270	19970304
	US 5849041	Α	19981215	US 1997-811614	19970305
	BR 9701309	Α	19980818	BR 1997-1309	19970314
PRAI	DE 1996-1961039	2	19960316		
os	MARPAT 127:2831	70			
GI					

AB An oxidative hair dye compn. comprises an 02

I

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oxidoreductase/substrate system, a peroxidase, and a
    m-phenylenediamine coupler [I; C1-6 alkoxy, (substituted) C1-6
    alkyl; R2, R3 = H, (substituted) C1-6 alkyl or mono- or dioxaalkyl; R4 =
    H, C1-6 alkyl] and has a pH of 6-9.5. Such compns.do not damage
    the hair and provide intense coloration, esp. when combined with
    direct dyes. Thus, a hair dye compn
     . contg. hydroxyethyl-p-phenylenediamine sulfate 0.025 mol,
     2-amino-4-(2'-hydroxyethyl)aminoanisole sulfate 0.025 mol, glucose
    oxidase (EC 1.1.3.4) 400 U, peroxidase (EC 1.11.1.7) 400 U, iso-PrOH
     5.000,, 1,2-propanediol 2.000, PEG-20 stearyl ether 1.400, glycerin 1.000,
    glucose 1.000, di-Na EDTA 0.300, ascorbic acid 0.100,
     2-amino-6-chloro-4-nitrophenol 0.075, and 0.1M borate buffer to 100.000 g,
    adjusted to pH 7.7 and applied to bleached hair for 30 or 60 min
    at room temp., conferred an intense brown color on the hair.
ST
    oxidative hair dye oxidoreductase
    peroxidase; phenylenediamine hair dye
    oxidoreductase peroxidase
ΙT
    Oxidative hair dyes
        (agent and process for oxidative dyeing of keratin fibers)
TT
    50-21-5, biological studies 50-99-7, D-Glucose, biological
               57-88-5, Cholesterol, biological studies
                                                          64-17-5, Ethanol,
    biological studies
                          69-89-6, Xanthine 69-93-2, Uric acid,
    biological studies
                          95-55-6, o-Aminophenol
                                                   95-70-5, 2,5-Diaminotoluene
    106-50-3, 1,4-Benzenediamine, biological studies
                                                        127-17-3,
    Pyruvic acid, biological studies
                                        144-62-7, Ethanedioic acid,
    biological studies
                          615-50-9
                                    2835-99-6, 4-Amino-m-cresol
    9001-37-0, Glucose oxidase
                                  9001-96-1, Pyruvate
    oxidase 9002-12-4, Uricase 9002-17-9, Xanthine oxidase
                             9028-72-2, Lactate oxidase
                                                          9028-76-6,
    9003-99-0, Peroxidase
    Cholesterol oxidase
                           9031-79-2, Oxalate oxidase 9055-15-6,
    Oxidoreductase
                      9073-63-6, Alcohol oxidase
                                                   66422-95-5
                              83763-48-8 90267-82-6
     75448-50-9
                 77636-89-6
                                                         93841-24-8
                               144630-47-7
                                              196408-55-6
     93841-25-9
                 144630-46-6
                                                            196408-56-7
    196408-57-8
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (agent and process for oxidative dyeing of keratin
        fibers)
IT
     9001-37-0, Glucose oxidase 9002-12-4, Uricase
    9002-17-9, Xanthine oxidase 9055-15-6,
    Oxidoreductase
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (agent and process for oxidative dyeing of keratin
        fibers)
RN
     9001-37-0 HCAPLUS
CN
    Oxidase, glucose (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     9002-12-4 HCAPLUS
RN
CN
    Oxidase, urate (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     9002-17-9 HCAPLUS
RN
CN
     Oxidase, xanthine (9CI)
                             (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN
     9055-15-6 HCAPLUS
CN
     Oxidoreductase (9CI) (CA INDEX NAME)
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*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     ANSWER 51 OF 53 HCAPLUS COPYRIGHT 2002 ACS
L70
AN
     1996:464484 HCAPLUS
     125:95537
DN
TI
     Stable one-pack oxidative hair dye composition containing
     Tsujino, Yoshio; Tomura, Kazuyo
IN
     Yamahatsu Sangyo Kaisha Ltd., Japan
PA
SO
     Eur. Pat. Appl., 20 pp.
     CODEN: EPXXDW
DT
     Patent
LA
     English
     ICM A61K007-13
IC
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                       KIND DATE
                                             APPLICATION NO. DATE
                                             -----
     ______
                       ----
                             -----
PI
     EP 716846
                      A1 19960619
                                            EP 1995-108786 19950607
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
     CA 2150596 AA 19960617
                                            CA 1995-2150596 19950531
     AU 9536624
                       A1
                             19960627
                                             AU 1995-36624
                                                               19951031
     JP 08217652
                       A2
                             19960827
                                             JP 1995-324370
                                                               19951213
                        Α
     CN 1132623
                             19961009
                                             CN 1995-119895
                                                               19951213
PRAI JP 1994-313175
                             19941216
     A 1-pack-type oxidative hair dye compn. with improved stability
     comprises uricase, an oxidative dye, uric acid, and optionally a
     reducing agent whose electrode potential is more pos. than that of
     ascorbic acid but more neg. than that of uric acid. The pH of
     the compn. is 6.7-9.5. Thus, a hair dye contg. p-phenylenediamine 2.0, m-phenylenediamine-HCl 0.1, m-aminophenol 0.8,
     Na2SO3 0.08, polyoxyethylene cetyl ether 8.0, stearyl alc. 2.5, oleyl alc. 5.0, behenyl alc. 2.0, cetyl alc. 2.0, cetyltrimethylammonium chloride
     1.0, glycerol 2.0, uricase (20 IU/mg) 1.5, uric acid
     5.0, ethanolamine to pH 8.75, and water to 100 wt.% conferred a grayish
     color on white hair.
ST
     oxidative hair dye uricase urate
ΙT
     Reducing agents
        (as stabilizers; stable one-pack oxidative hair dye compn.
        contg. uricase)
ΙT
     Stabilizing agents
        (reducing agents as; stable one-pack oxidative hair dye compn
        . contg. uricase)
ΙT
     Hair preparations
        (dyes, oxidative, stable one-pack oxidative hair dye compn.
        contg. uricase)
ΙT
     68-11-1, Thioglycolic acid, biological studies
                                                        134-03-2, Sodium
     ascorbate
                  616-91-1, N-Acetyl-L-cysteine 3374-22-9, DL-Cysteine
     7757-83-7, Sodium sulfite
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (stabilizer; stable one-pack oxidative hair dye compn. contq.
        uricase)
ΙT
     69-93-2, Uric acid, biological studies 95-55-6, o-Aminophenol
     106-50-3, p-Phenylenediamine, biological studies 108-45-2, m-Phenylenediamine, biological studies 123-30-8, p-Aminophenol
     541-69-5, m-Phenylenediamine hydrochloride
                                                     591-27-5, m-Aminophenol
     9002-12-4, Uricase 19142-74-6, Potassium urate
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
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4-Hydroxyindole 3131-52-0, 5,6-Dihydroxyindole 4790-08-3, 5,6-Dihydroxyindole 2-carboxylic acid 4813-45-0, 3-Methyl

5,6-dihydroxyindole 4821-00-5, 1-Methyl 5,6-dihydroxyindole 4821-01-6,

```
2-Methyl 5,6-dihydroxyindole 5107-75-5, 2,3-Dimethyl-5,6-dihydroxyindole
     5192-03-0, 5-Aminoindole 5192-04-1, 7-Aminoindole 5192-23-4, 4-Aminoindole 29539-03-5, 5,6-Dihydroxyindoline 74795-36-1,
                                                             74795-36-1, 5-Methoxy
     6-hydroxyindoline 119963-90-5, 2-Methyl 5,6-dihydroxyindole hydrobromide
     121545-88-8, 4,5-Dihydroxyindoline 121545-90-2, 4-Hydroxy
     5-methoxyindoline
                         139721-20-3, N-Ethyl 5,6-dihydroxyindoline
     139721-21-4, N-Methyl 5,6-dihydroxyindoline
                                                      139721-22-5, N-Butyl
     5,6-dihydroxyindoline
                               151980-97-1, 6-Hydroxy-7-methoxyindoline
     151980-99-3, 6,7-Dihydroxyindoline
     RL: BIOL (Biological study)
        (hair dye prepns. contg. hydrogen peroxide and peroxidase and)
TΤ
     9003-99-0, Peroxidase
     RL: BIOL (Biological study)
        (hair dye prepns. contg. indole or indoline derivs. and hydrogen
        peroxide and)
     7722-84-1, Hydrogen peroxide, biological studies
TΤ
     RL: BIOL (Biological study)
        (hair dye prepns. contg. indole or indoline derivs. and peroxidase and)
IT
     50-21-5, Lactic acid, biological studies
                                                  50-99-7,
     Glucose, biological studies 56-84-8, Aspartic acid, biological
                56-86-0, Glutamic acid, biological studies
                                                                59-23-4, Galactose,
     biological studies
                            64-17-5, Ethanol, biological studies
                                                                    67-63-0,
     Isopropanol, biological studies
                                         69-93-2, Uric acid, biological
               87-79-6, L-Sorbose 127-17-3, Pyruvic acid, studies 144-62-7, Oxalic acid, biological studies
     studies
     biological studies
                                    9001-96-1, Pyruvate
     9001-37-0, Glucose oxidase
                                    9028-72-2, Lactate
     oxidase 9002-12-4, Uricase
                9028-79-9, Galactose oxidase 9031-79-2, Oxalate oxidase Alcohol oxidase 37250-80-9, Pyranose oxidase 37250-8
     oxidase
     9073-63-6, Alcohol oxidase
     39346-34-4, Glutamate oxidase
                                       69106-47-4 71245-08-4, Secondary alcohol
     oxidase
     RL: BIOL (Biological study)
        (in hydrogen peroxide prepn., for hair dye
        compns. contg. indole or indoline derivs. and peroxidase)
IT
     9001-37-0, Glucose oxidase 9002-12-4, Uricase
     RL: BIOL (Biological study)
        (in hydrogen peroxide prepn., for hair dye
     compns. contg. indole or indoline derivs. and peroxidase)
9001-37-0 HCAPLUS
RN
     Oxidase, glucose (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN
     9002-12-4 HCAPLUS
     Oxidase, urate (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     ANSWER 53 OF 53 HCAPLUS COPYRIGHT 2002 ACS
     1991:519807 HCAPLUS
ΑN
     115:119807
DN
ΤI
     The application of oxidases to hair dyeing and permanent waving
     Tsujino, Yoshio; Kitayama, Kouji; Yokoo, Yoshiharu; Sakato, Kuniaki
ΑU
     Yamahatsu Sangyo Kaisha, Ltd., Osaka, 557, Japan
CS
     J. SCCJ (1991), 24(3), 220-3
CODEN: JOSCDQ; ISSN: 0387-5253
SO
DT
     Journal
LA
     Japanese
     62-3 (Essential Oils and Cosmetics)
CC
     The use of H2O2 produced by enzymic oxidn. was investigated for oxidative
AB
     hair dyeing and permanent waving. For enzymic oxidns. pyruvate
```

oxidase, lactate oxidase, glycerol oxidase, xanthine oxidase, uricase and pyranose oxidase were used. Successful dyeing of qoat hair was carried out using uricase and pyranose oxidase in a com. hair dyeing formulation with p-phenylenediamine. Uricase produced the max. H2O2 concn. up to about 0.06% after 5 min. of reaction at pH 7.0. The effect of enzyme on hair waving was estd. according to the Kirby method. Results on waving efficiency and wave retention ratio showed that permanent waving with uricase is almost equiv. to the chem. method with NaBr. ST oxidase hair prepn peroxide Hair preparations ΙT (dyes, oxidases in, for prodn. of hydrogen peroxide) ΙT Hair preparations (wave-setting, oxidases in, for prodn. of hydrogen peroxide) 9001-96-1, **Pyruvate** oxidase **9002-12-4**, Uricase IT 9002-17-9, Xanthine oxidase 9028-72-2, Lactate oxidase 9035-73-8, Oxidase 37250-80-9, Pyranose oxidase 6966 Glycerol oxidase RL: BIOL (Biological study) (hydrogen peroxide produced by, in hair dye and permanent waving compns.) IT 7722-84-1P, Hydrogen peroxide, uses and miscellaneous RL: PREP (Preparation); USES (Uses) (oxidases prodn. of, in hair dye and permanent waving compns .) IT 9002-12-4, Uricase 9002-17-9, Xanthine oxidase RL: BIOL (Biological study)

- - (hydrogen peroxide produced by, in hair dye and permanent waving compns.)
- RN 9002-12-4 HCAPLUS
- Oxidase, urate (9CI) (CA INDEX NAME) CN
- *** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
- RN 9002-17-9 HCAPLUS
- CN Oxidase, xanthine (9CI) (CA INDEX NAME)
- *** STRUCTURE DIAGRAM IS NOT AVAILABLE ***